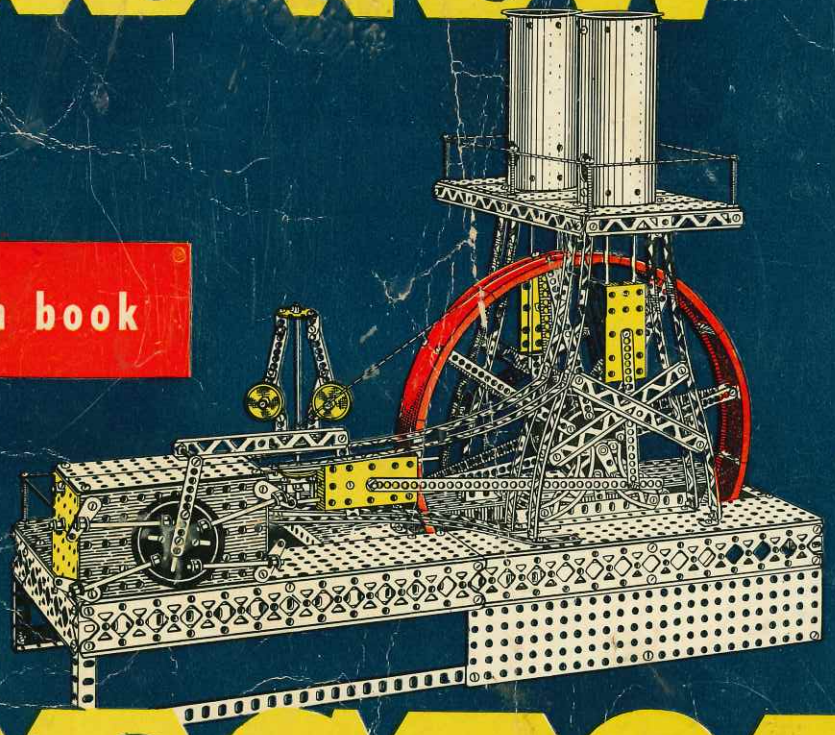
THE NEW

How to make 'em book



Giant Power Plant
Built with 10½ Erector Set

ERECTOR®

THE WORLD'S GREATEST CONSTRUCTION TOY · DEVELOPED AT THE GILBERT HALL OF SCIENCE

How to Get the Most FUN Out of Your ERECTOR®

A. C. Gilbert
inventor of Erector
and founder of the
Gilbert Hall of
Science

The Gilbert Hall of Science, the greatest scientific institution of its kind in the world and the home of Erector, American Flyer Trains, Gilbert Chemistry Sets and other Gilbert scientific outfits.

A PERSONAL MESSAGE FROM THE INVENTOR OF ERECTOR

YOU are a lucky boy to get an Erector Set. No other construction set contains so many different parts and builds so many different models. You may be interested to know, for instance, that the United States Patent Office has issued over 100 patents covering various Erector features.

You will find that Erector brings you double-header fun. First is the fun of building giant bridges, towering cranes, mighty engines and other exciting mechanical marvels. Second is the fun of making your model buzz with action — because most every Erector set has an electric engine or a mechanical motor.

I know you will get a great thrill out of building Erector models and seeing them grow bigger and bigger as you add one part after another. Note, too, that Erector base plates and girders have equidistant holes — so that you only have to count the holes to build square and true. Also, Erector parts are fastened together with firm-fitting nuts and bolts similar to those used in real engineering.

This book shows a few of the many models you can build with your Erector. *But be sure to start right.* Build a few of the simple models first — those shown in the sections on the 1½ and 2½ Erector. Then build several bridges. Every new model will bring you a new thrill. You should then be ready to progress to the larger, action models. In building these models, it is worth knowing that many of them were originated by boys — and you should feel free to change them or improve them in any way you see fit. Creating new models is a big part of the fun of being an Erector Engineer.

Your Friend,

A. C. Gilbert

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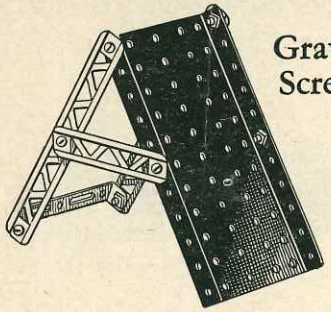
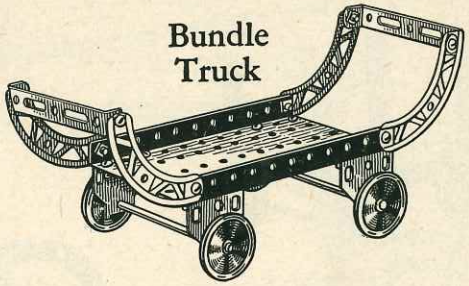
"how to make 'em" BOOK ...featuring the ERECTOR®



Gravel Screen

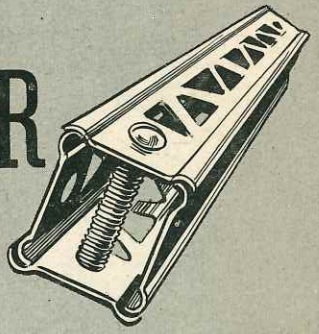


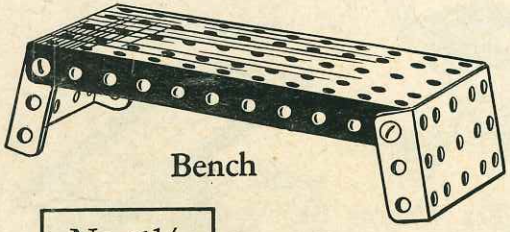
Bundle Truck

all-steel

SQUARE GIRDER

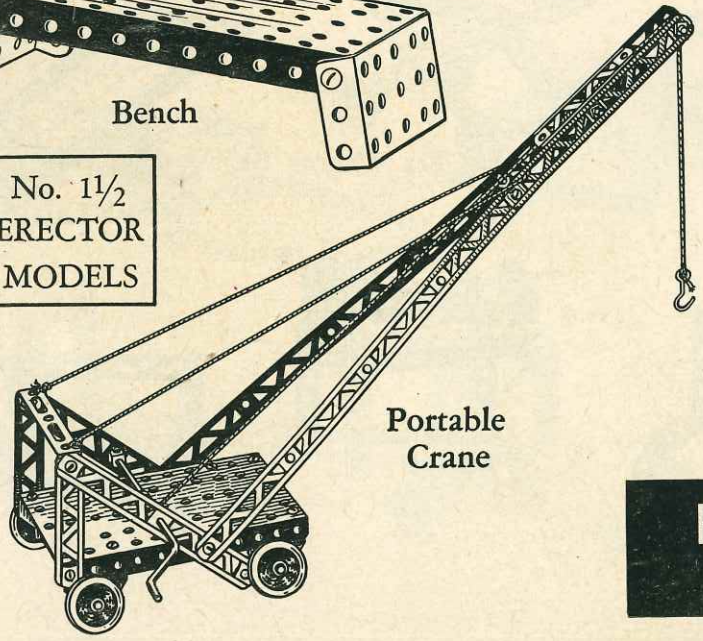
with interlocking edges



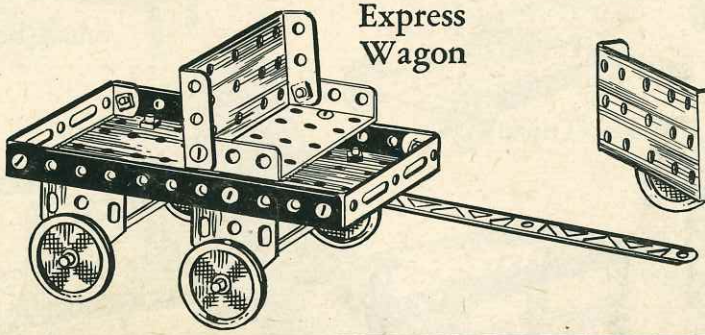


Bench

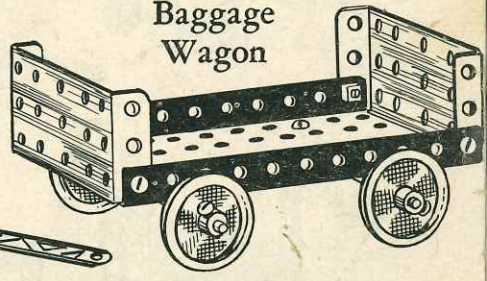
No. 1½ ERECTOR MODELS



Portable Crane



Express Wagon



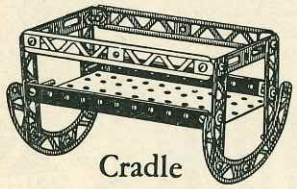
Baggage Wagon

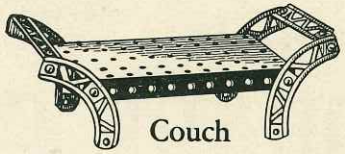
BUILD 'EM YOURSELF WITH ERECTOR

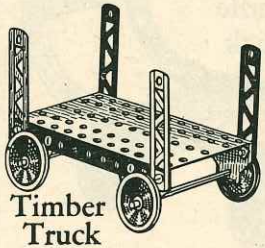
The World's Greatest Construction Toy

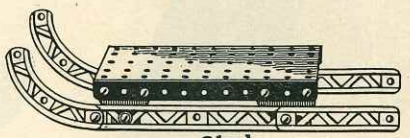
Models Built with No. 1 and 1½ Erector

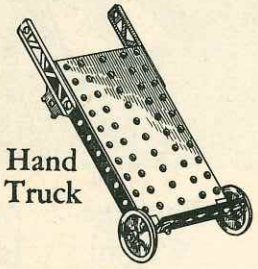
The number of models that can be built with Erector is unlimited. While we show a great many in this book, they are only indications of the large number of different varieties and the adaptability of Erector, The World's Greatest Toy.

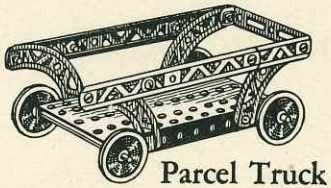

Cradle


Couch

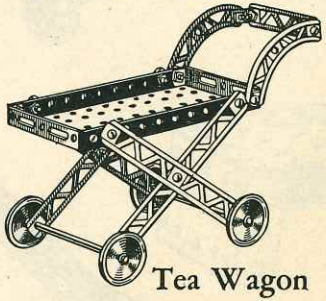

Timber Truck

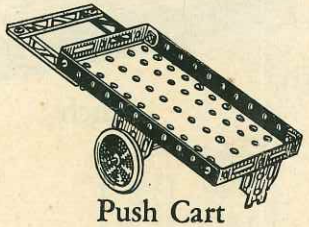

Sled

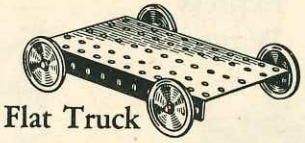

Hand Truck

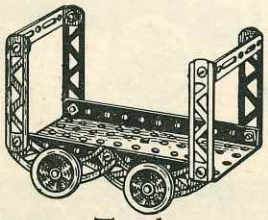

Parcel Truck

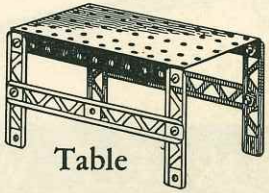
Small Bed


Tea Wagon


Push Cart


Flat Truck


Baggage Truck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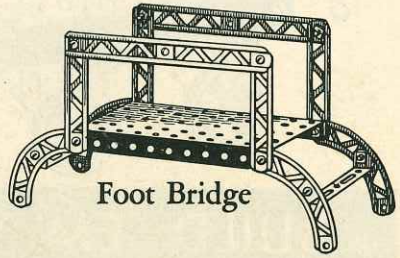
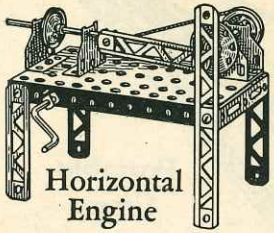
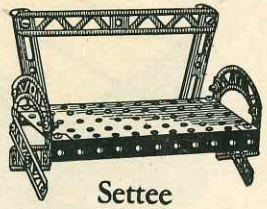
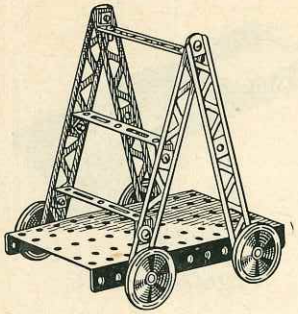

Foot Bridge

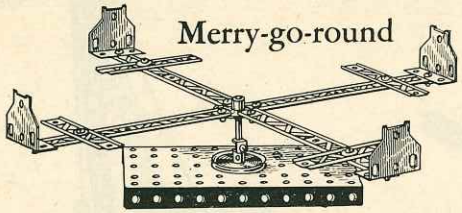

Horizontal Engine


Settee

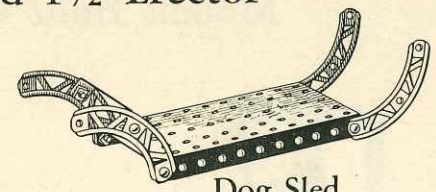
Models Built with No. 1 and 1½ Erector



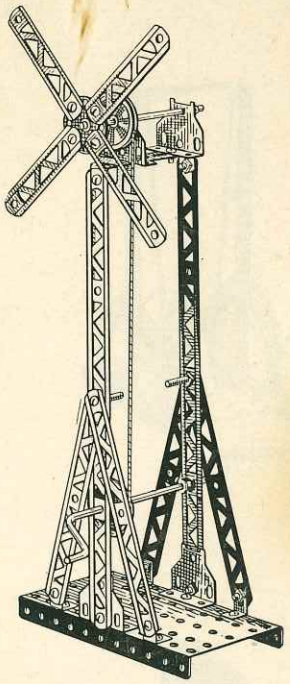
Truck Ladder



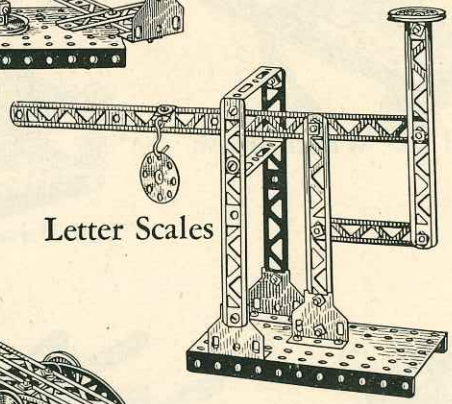
Merry-go-round



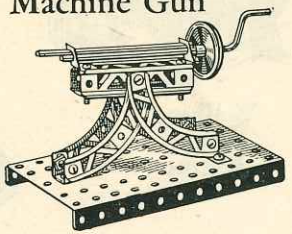
Dog Sled



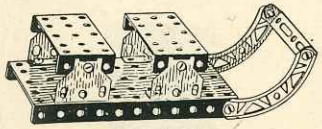
Windmill Pump



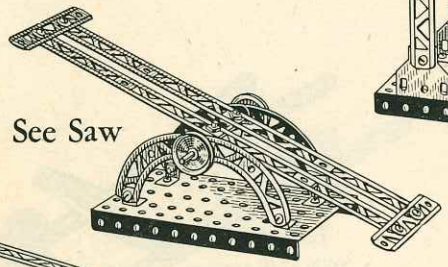
Letter Scales



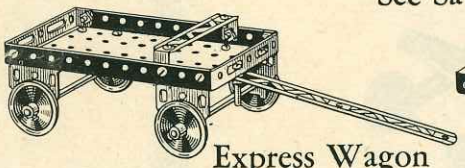
Machine Gun



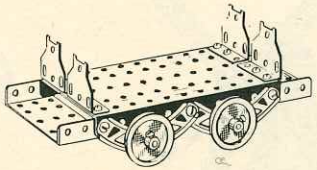
Sled



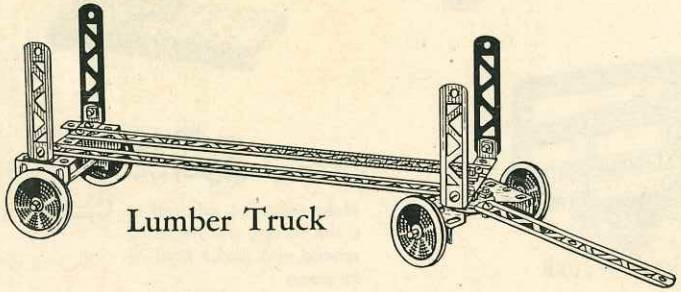
See Saw



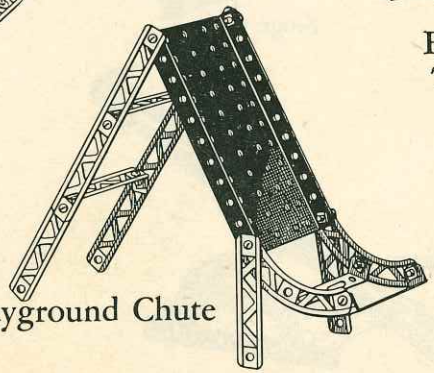
Express Wagon



Factory Truck



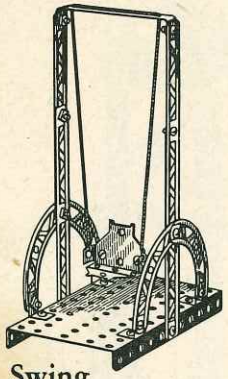
Lumber Truck



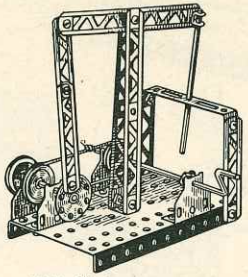
Playground Chute

Wagon

Models Built with No. 1 and 1½ Erector

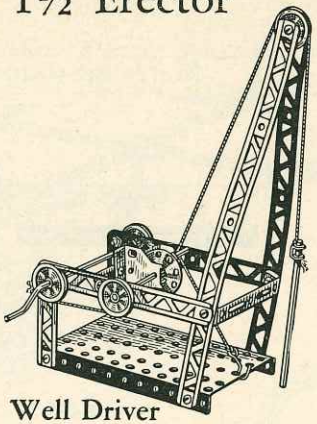


Swing

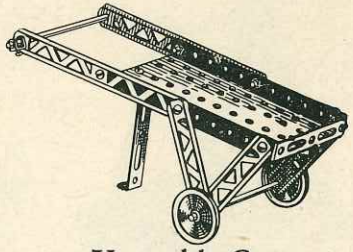


Walking Beam Engine

Small Wheelbarrow

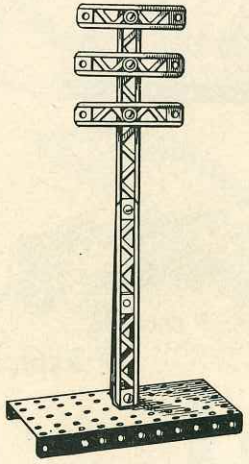


Well Driver

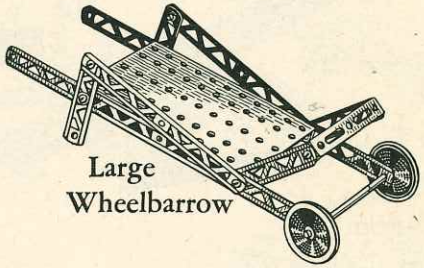


Vegetable Cart

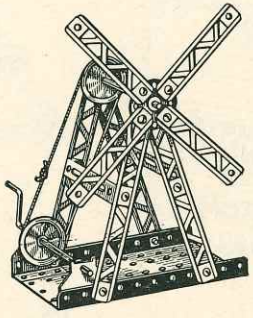
Telephone Pole



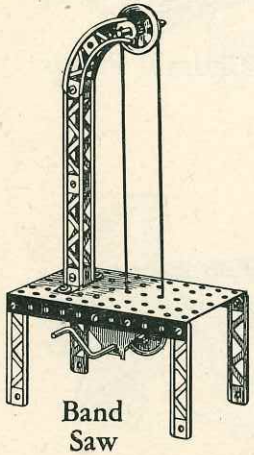
Siege Gun



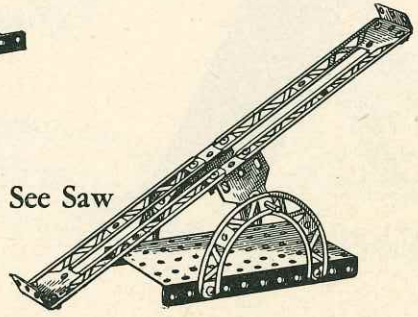
Large Wheelbarrow



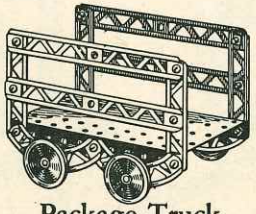
Small Windmill



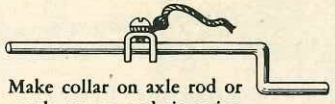
Band Saw



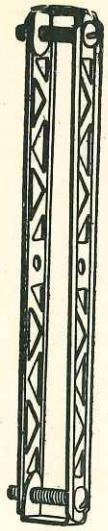
See Saw



Package Truck



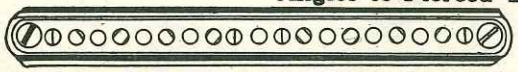
Make collar on axle rod or crank secure, and tie string around and under head of set screw



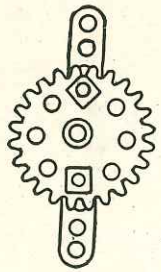
Parallel Beam

10 in. Square Girder

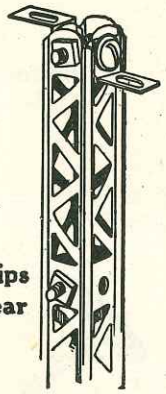
Method of fastening Double Angles to Pierced Disc



—Showing method of making bearings for axle



Fastening Strips to Pierced Gear

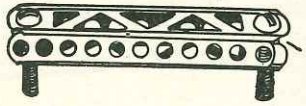


How Channel Keeps Angle in Position

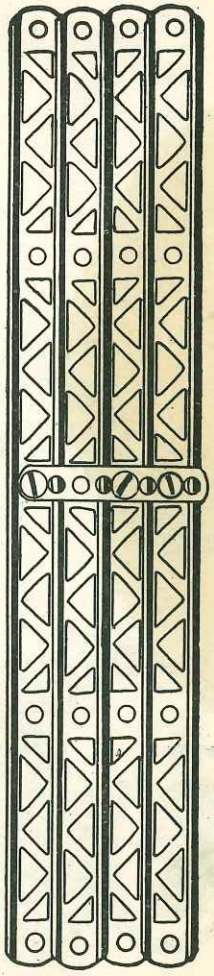
5 in. Square Girder

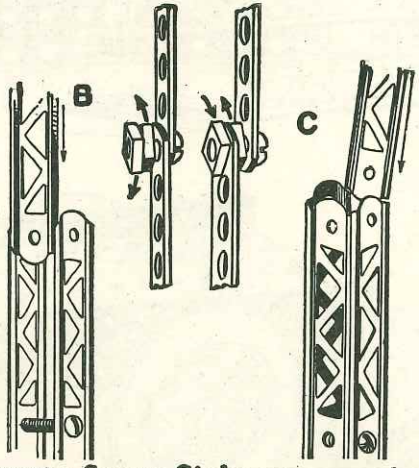
Method of locking nuts to permit strips to swivel. Turn nuts in opposite direction as shown by arrows.

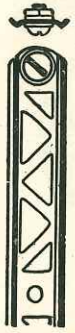
—2½ in. Square Girder



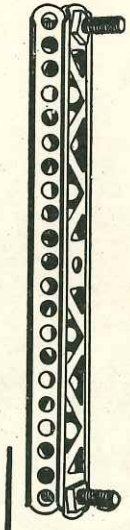
—2½ in. I-beam



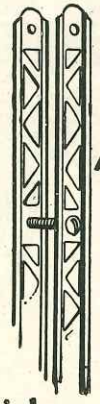




use washers to prevent screw from protruding too far beyond girder



5 in. I-beam

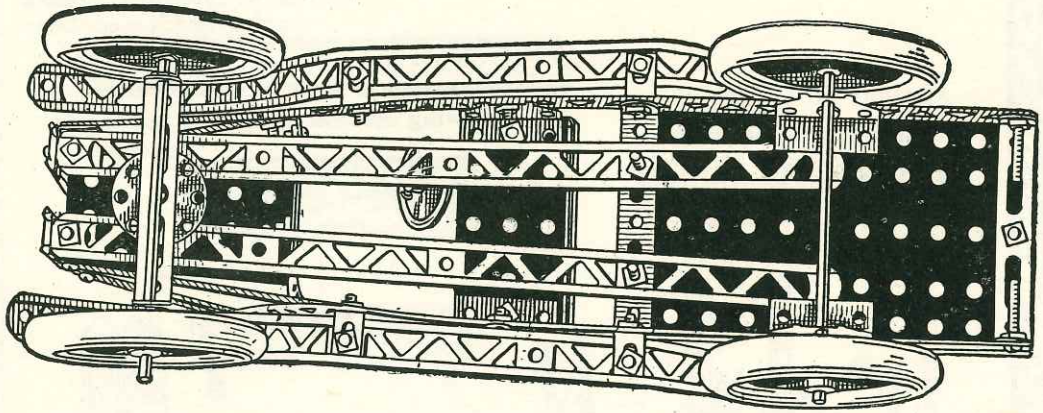


To construct a Square Girder commence by putting a long screw through center holes of two girders, as in A; then separate the two, take another girder pushing it down into the grooves or channels, as in B. Having assembled the three sides, take the fourth girder and likewise insert it into the grooves or channels, as in C; then slide it down until the two are flush, which makes a square column girder.

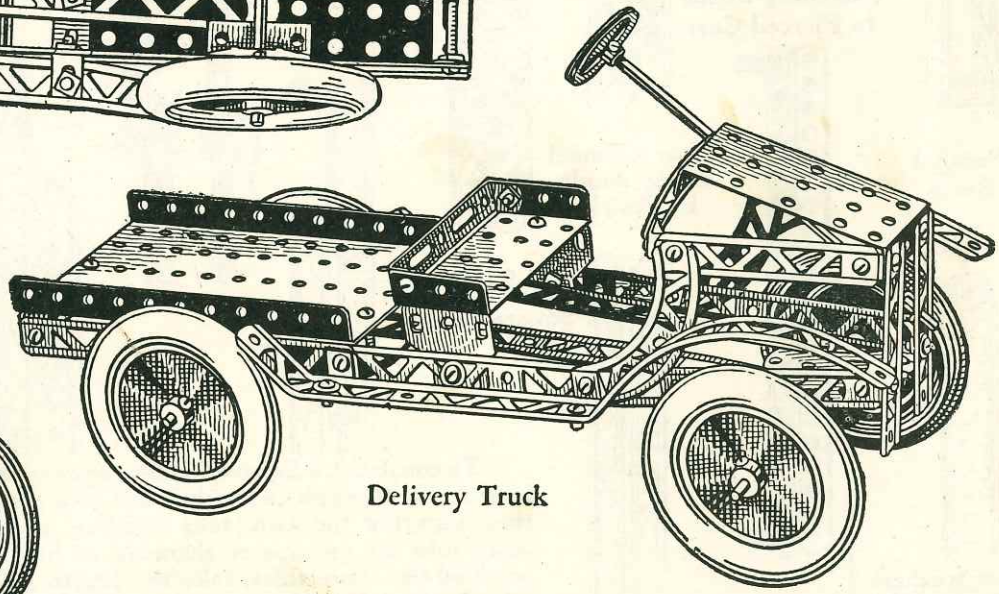
—Angle Iron

Flooring Construction

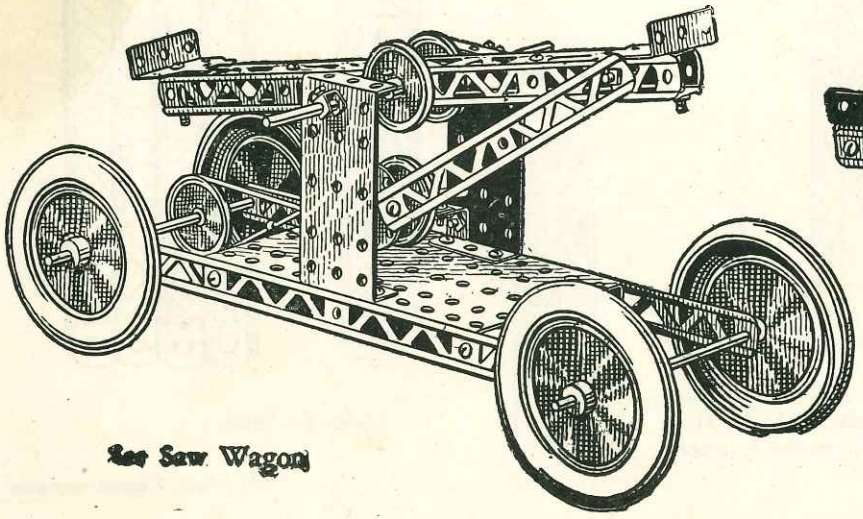
Models Built with No. 2½ and 3 Erector



Bottom View
Delivery Truck

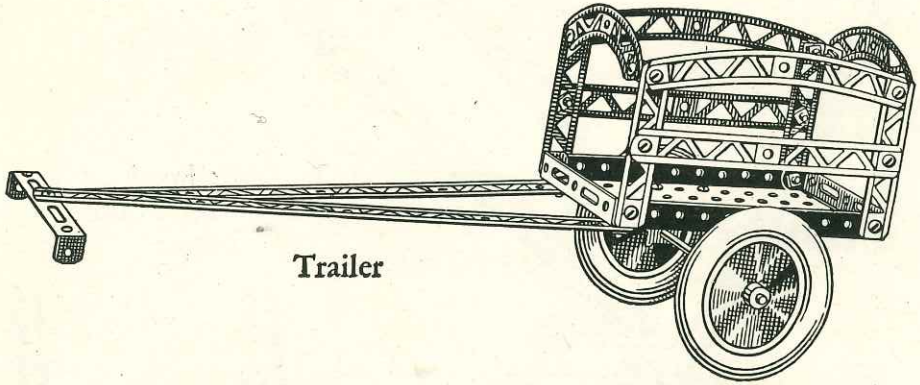


Delivery Truck

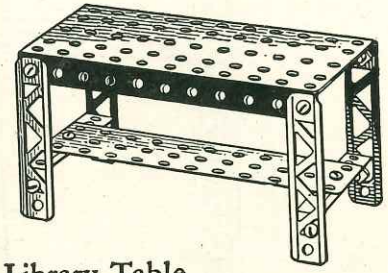


Saw Wagon

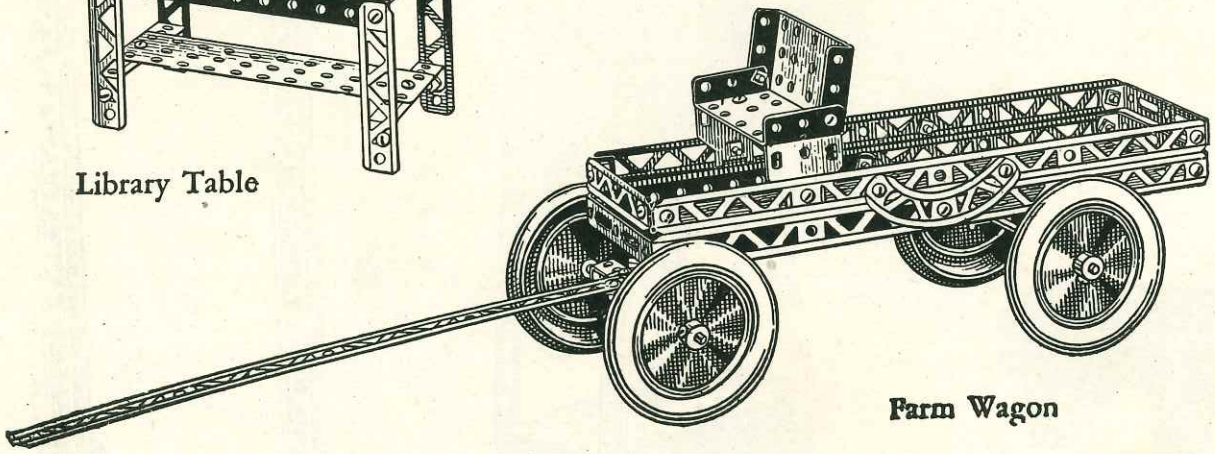
Models Built with No. 2½ and 3 Erector



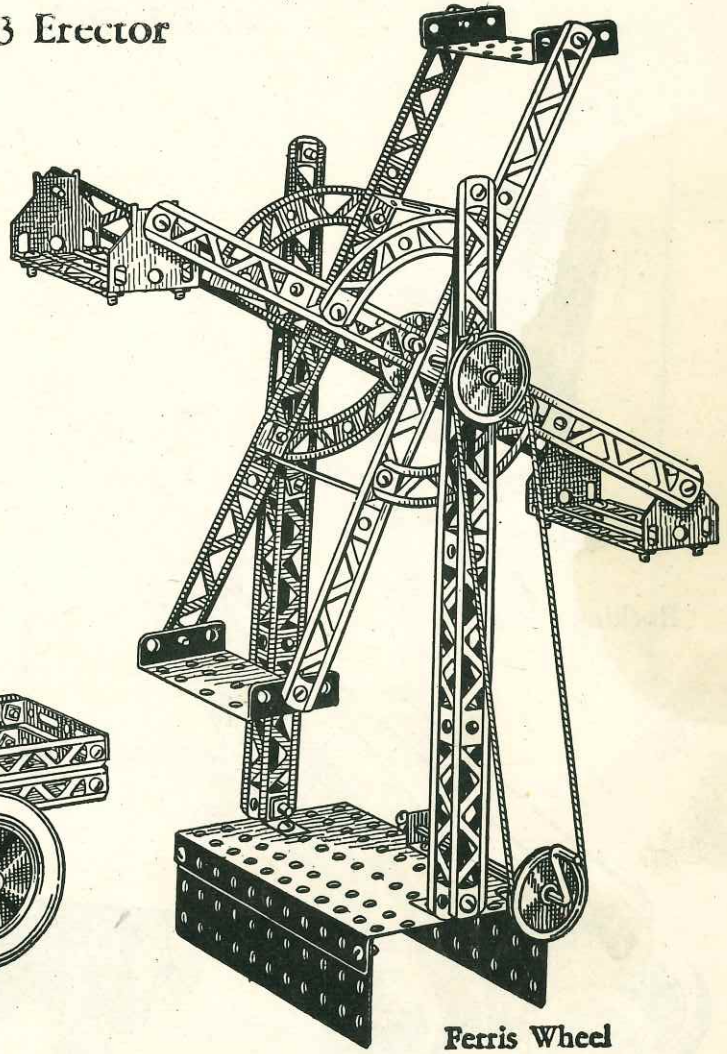
Trailer



Library Table

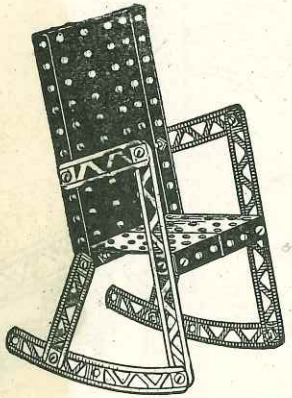


Farm Wagon

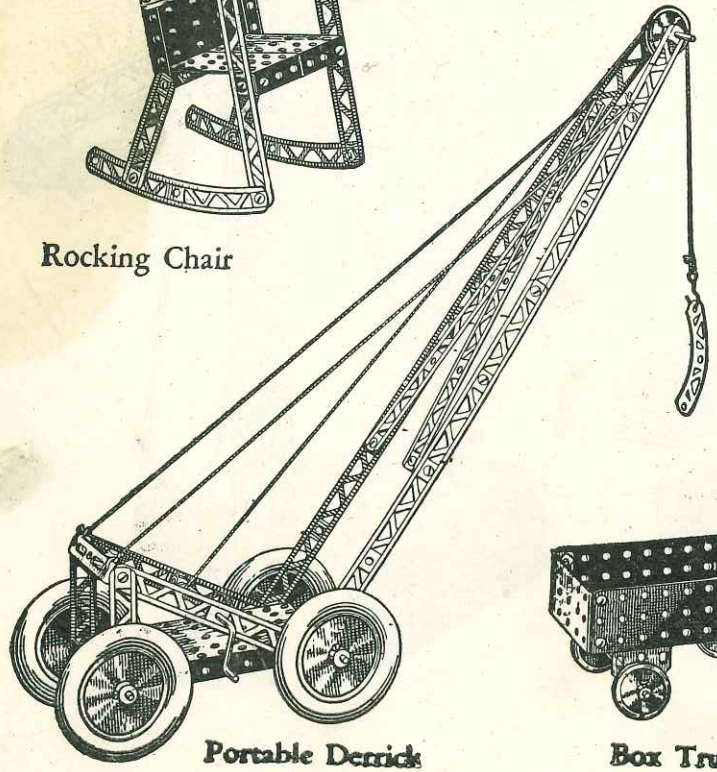


Ferris Wheel

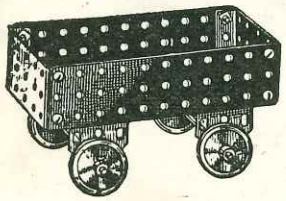
Models Built with No. 2½ and 3 Erector



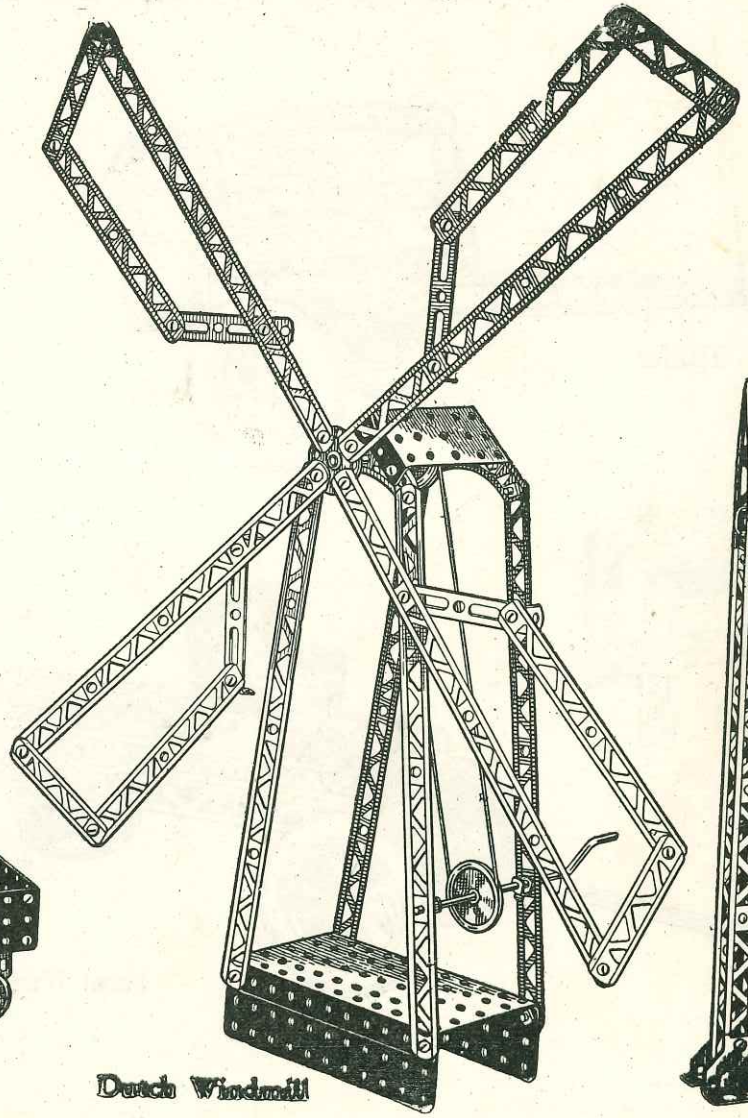
Rocking Chair



Portable Derrick

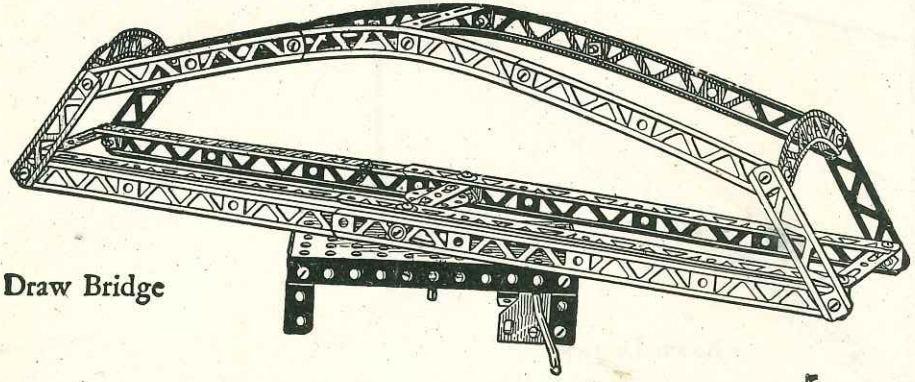


Box Truck

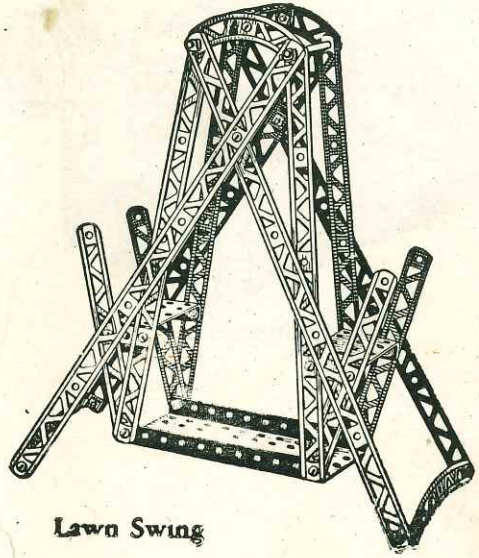


Dutch Windmill

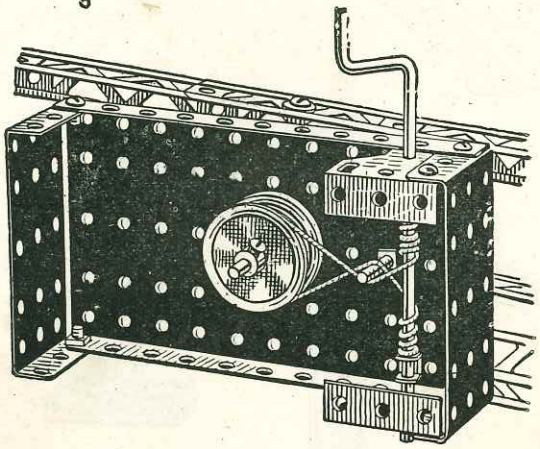
Railroad
Electrification
Tower



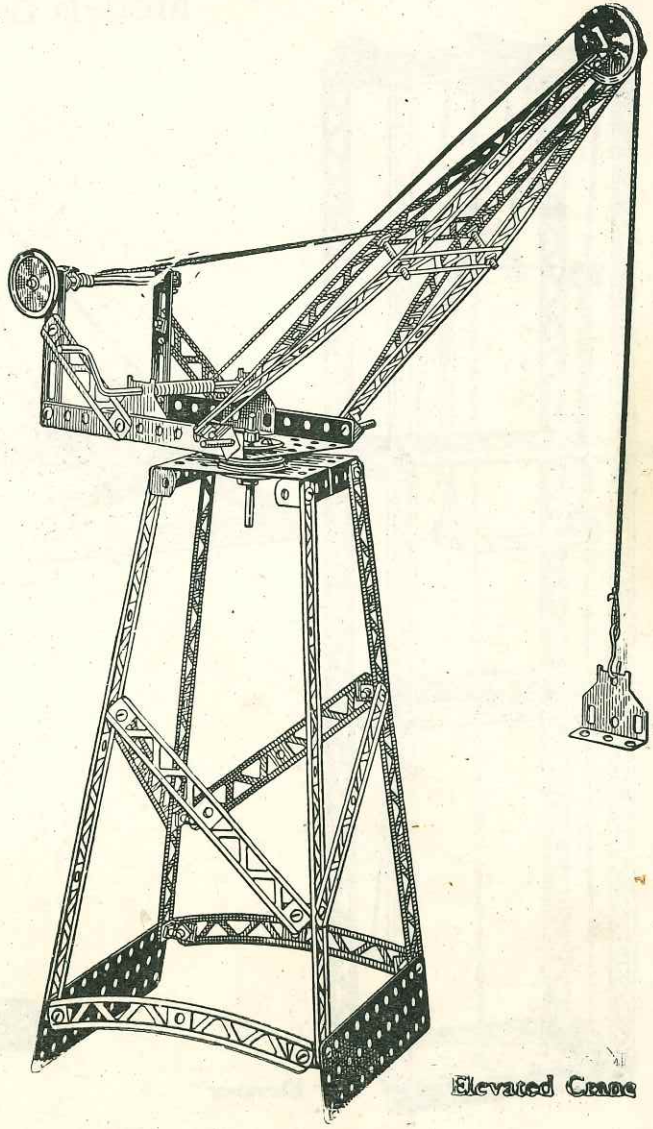
Draw Bridge



Lawn Swing

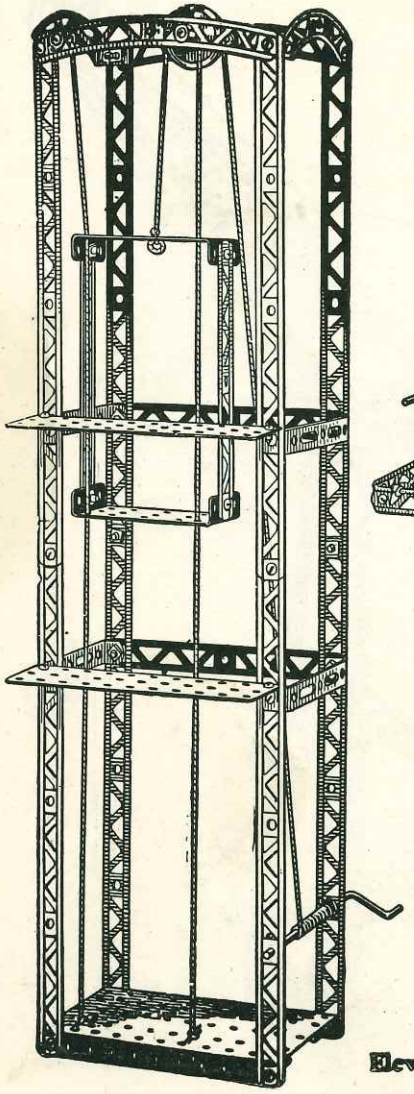


Bottom View of Draw Bridge

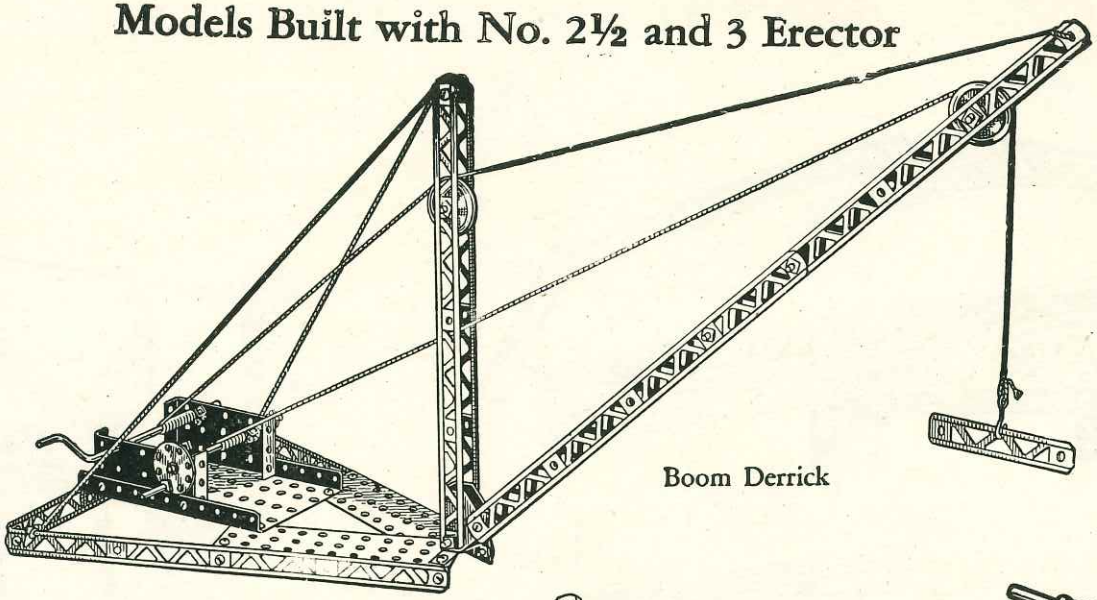


Elevated Crane

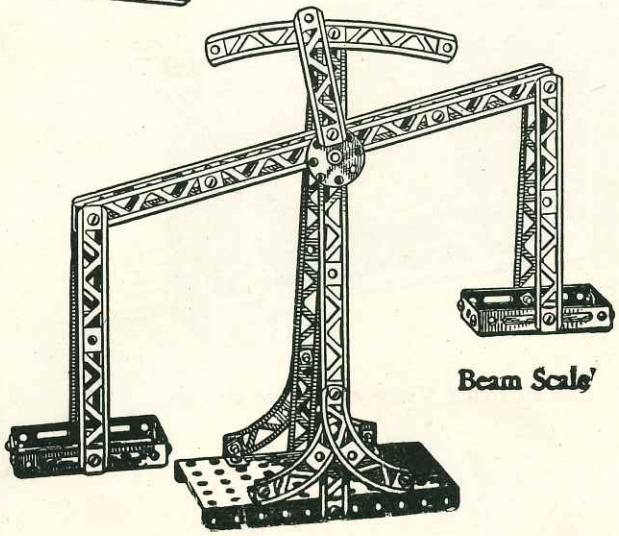
Models Built with No. 2½ and 3 Erector



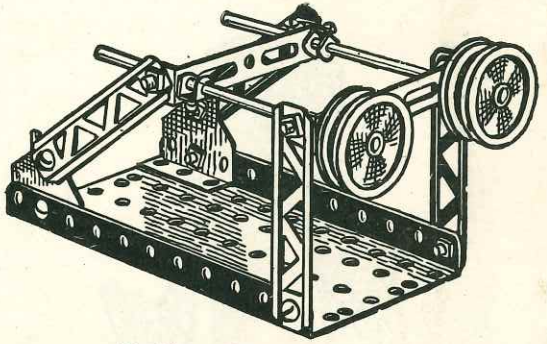
Elevator



Boom Derrick

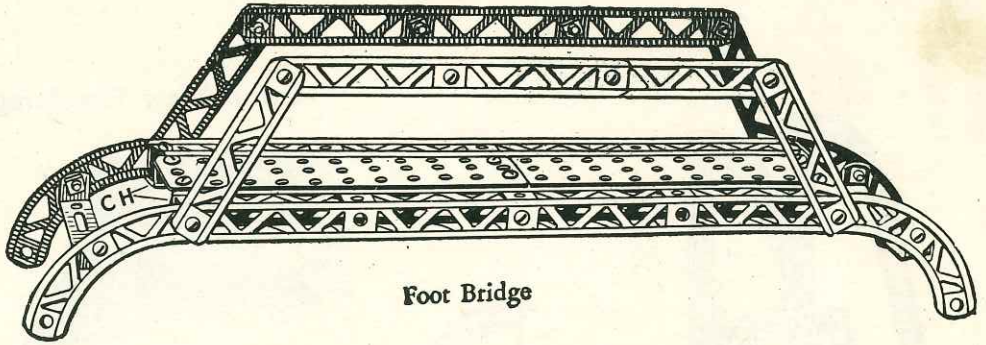


Beam Scale

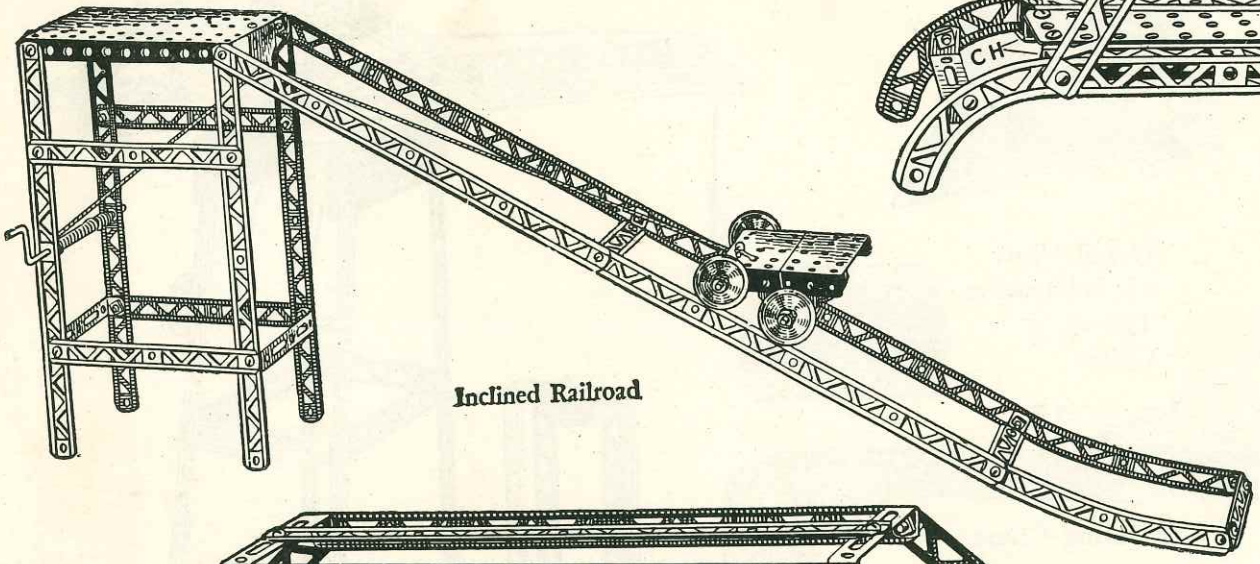


Railway Bumper

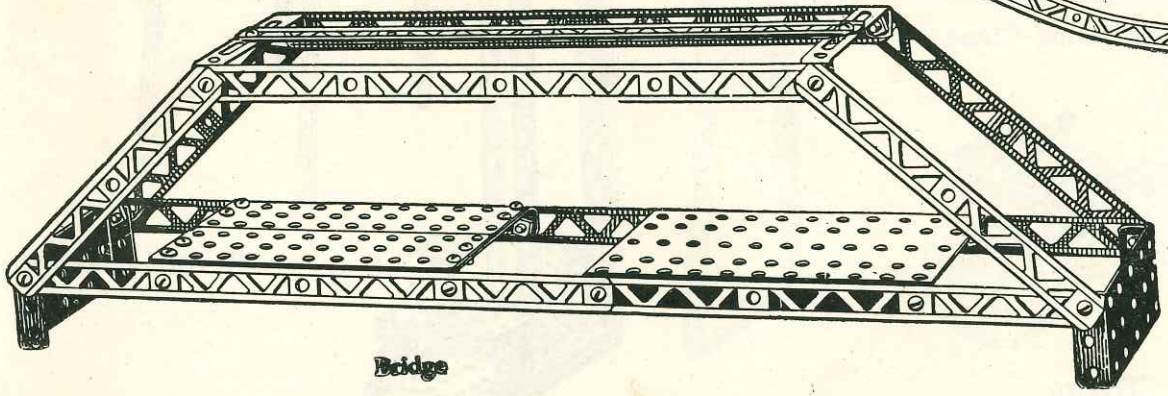
Models Built with No. 2½ and 3 Erector



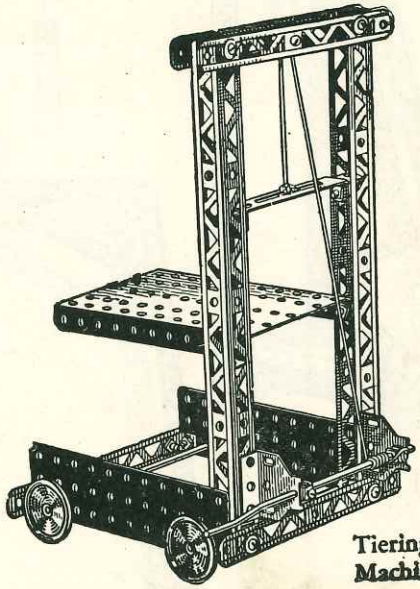
Foot Bridge



Inclined Railroad



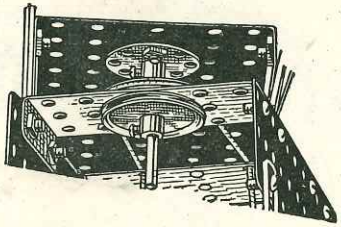
Bridge

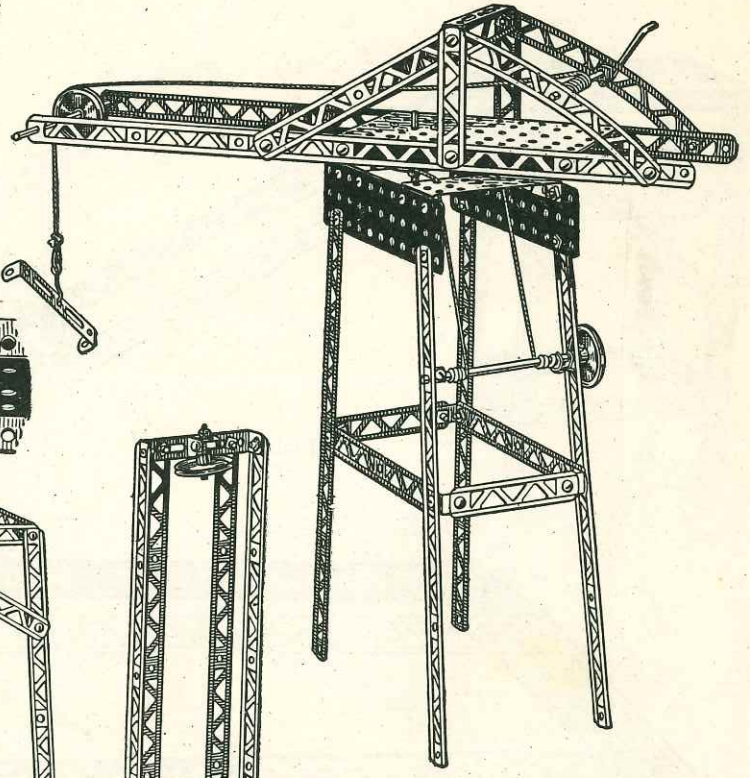


Tiering Machine

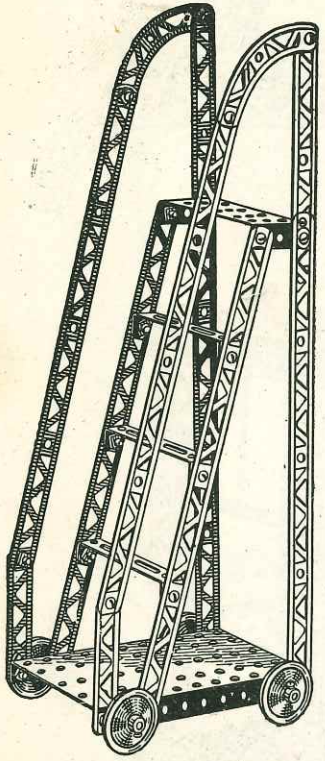
Models Built with No. 2½ and 3 Erector

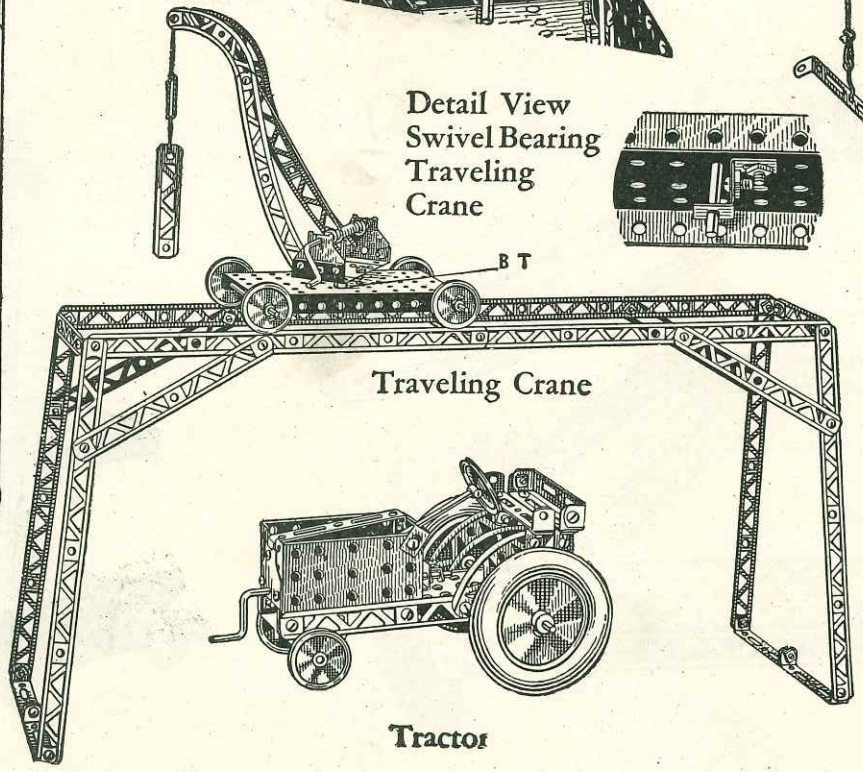
Detail View Revolving Crane





Detail View
Swivel Bearing
Traveling
Crane

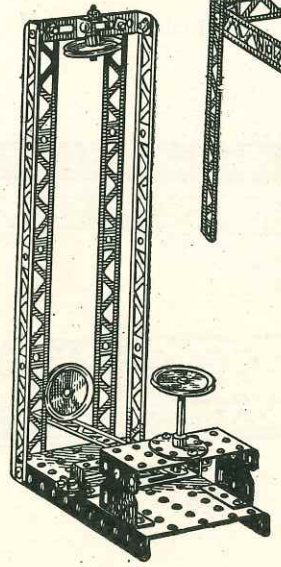




Traveling Crane

Portable Ladder

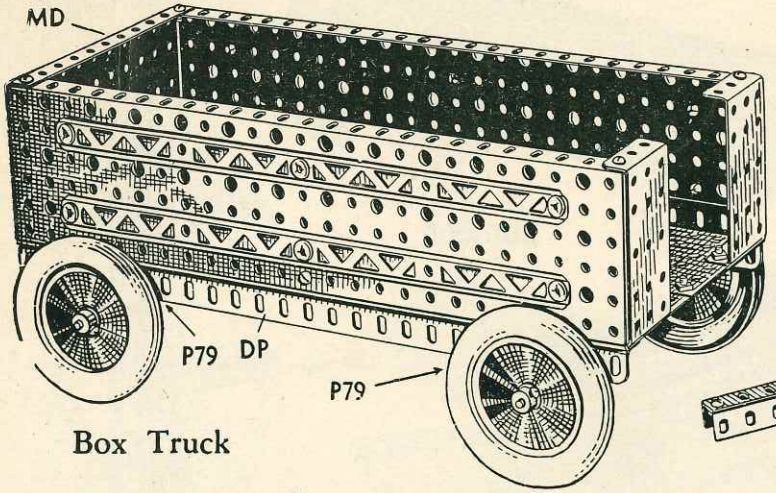
Tractor



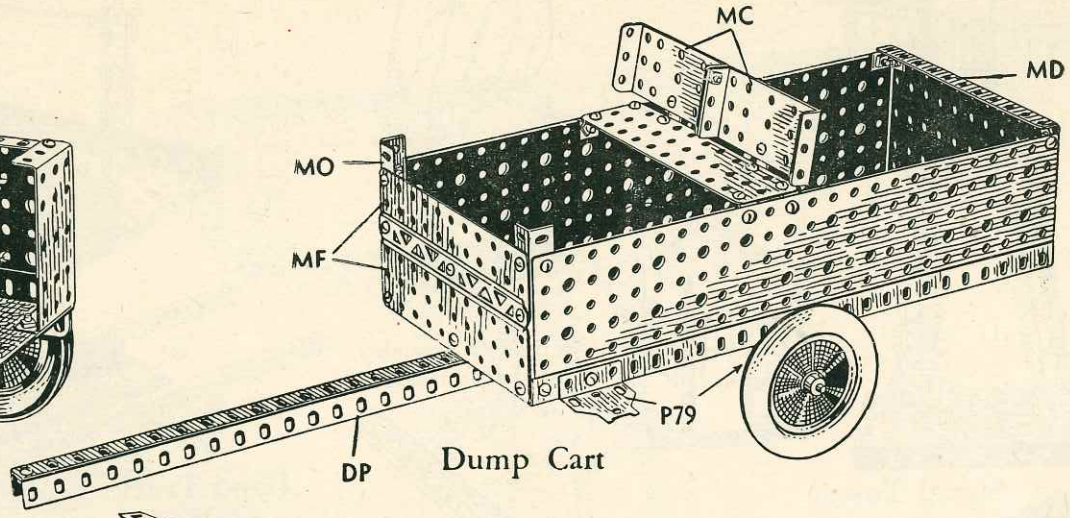
Revolving Crane

Strength Tester

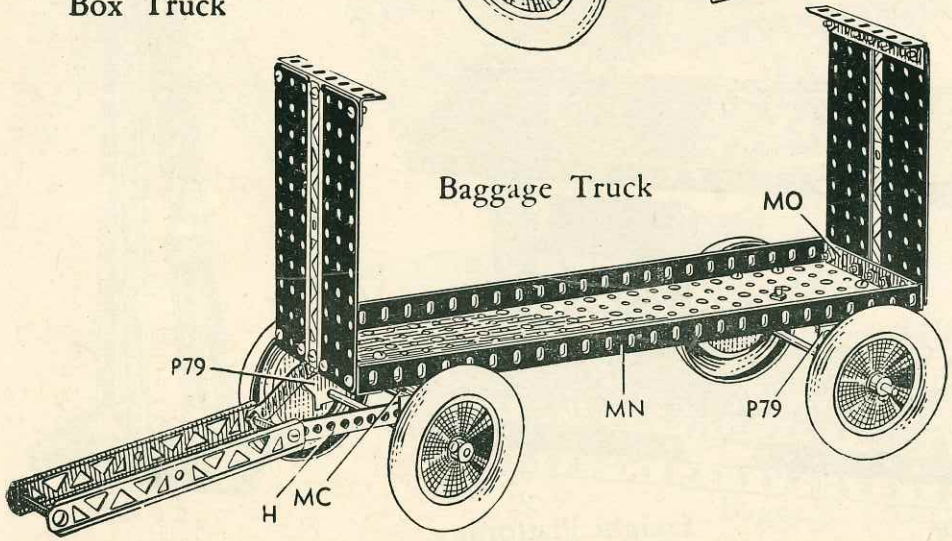
Models Built with No. 4½ Erector

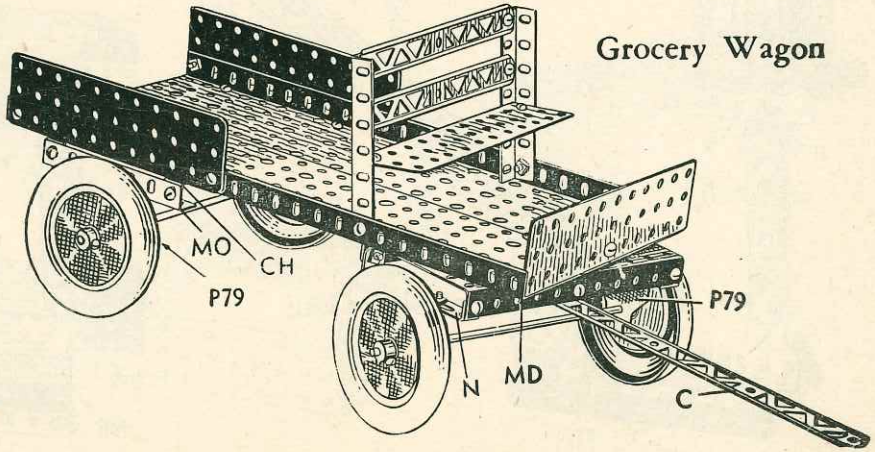


Box Truck



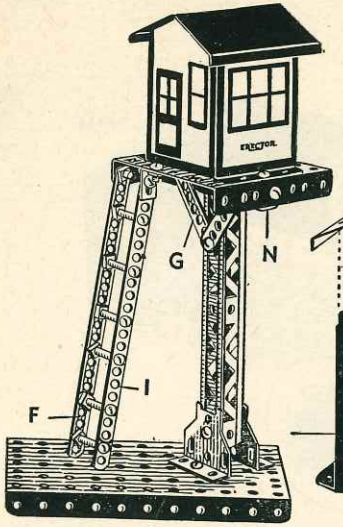
Dump Cart



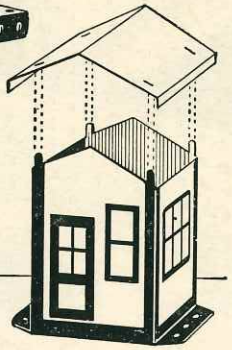


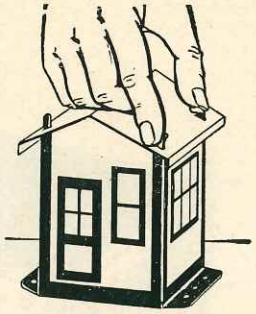
Grocery Wagon

Models Built with No. 4½ Erector

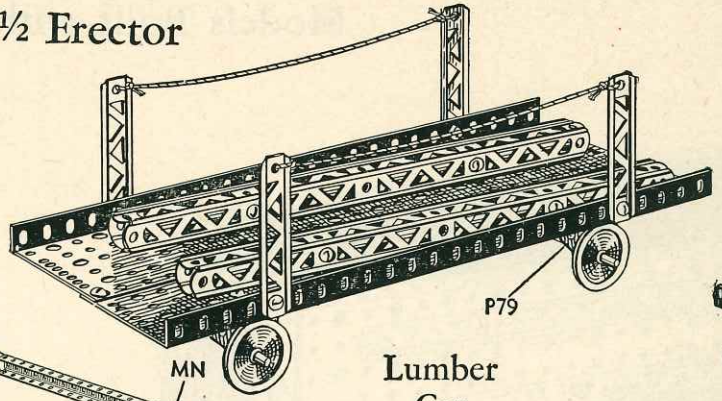


Signal Tower

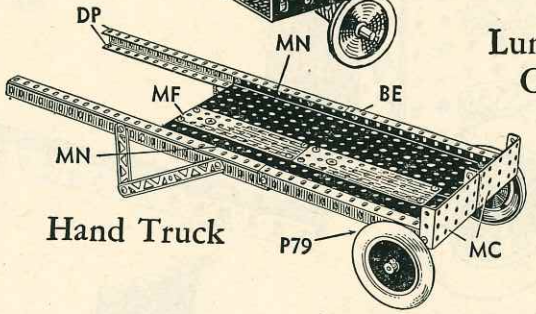




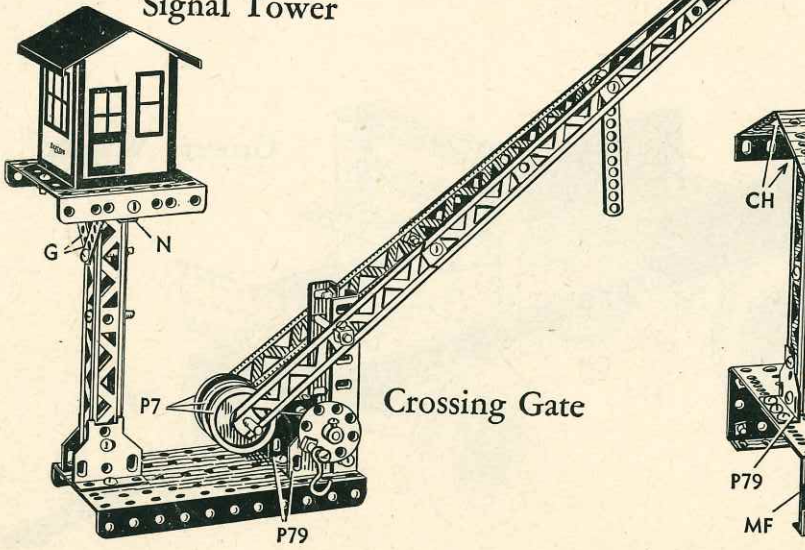
Method of Assembly of Roof to House



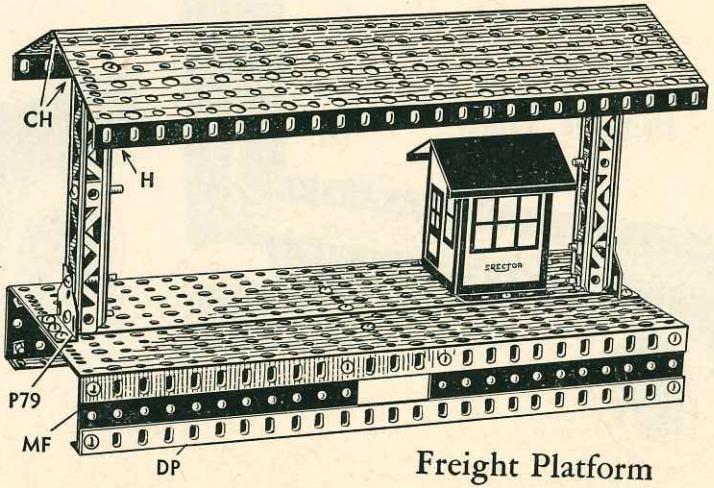
Lumber Car



Hand Truck

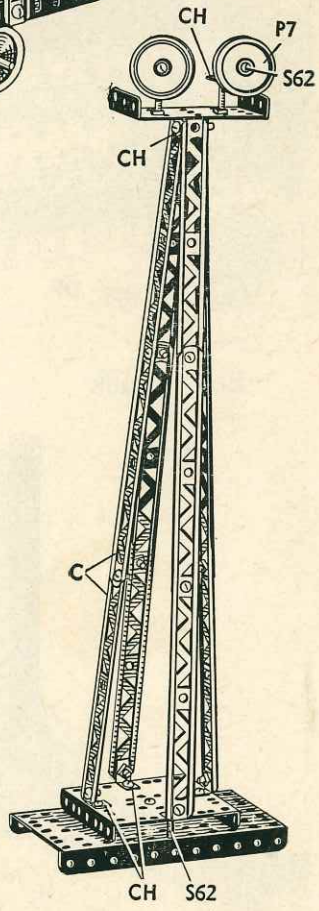


Crossing Gate

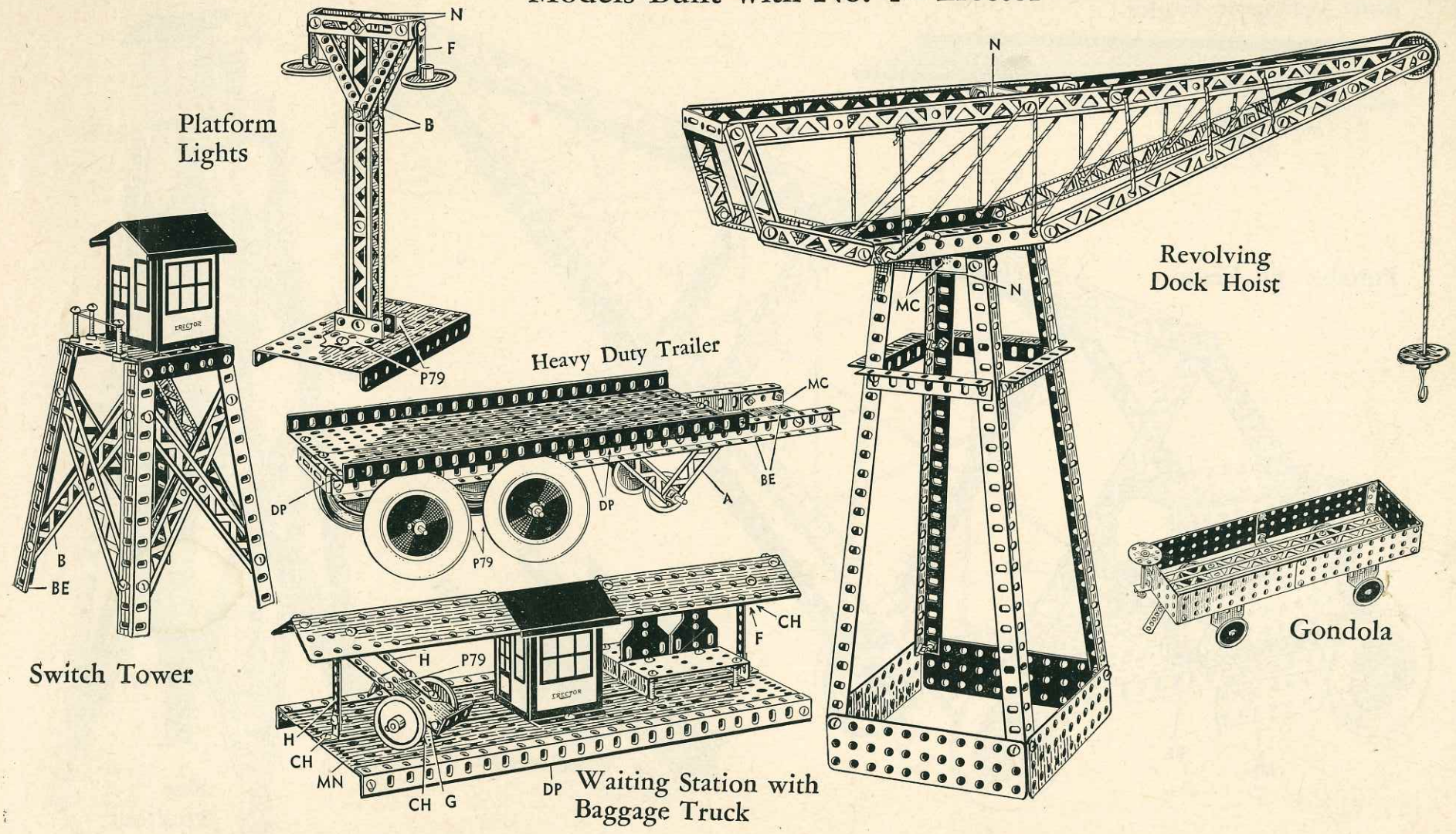


Freight Platform

Floodlight Tower



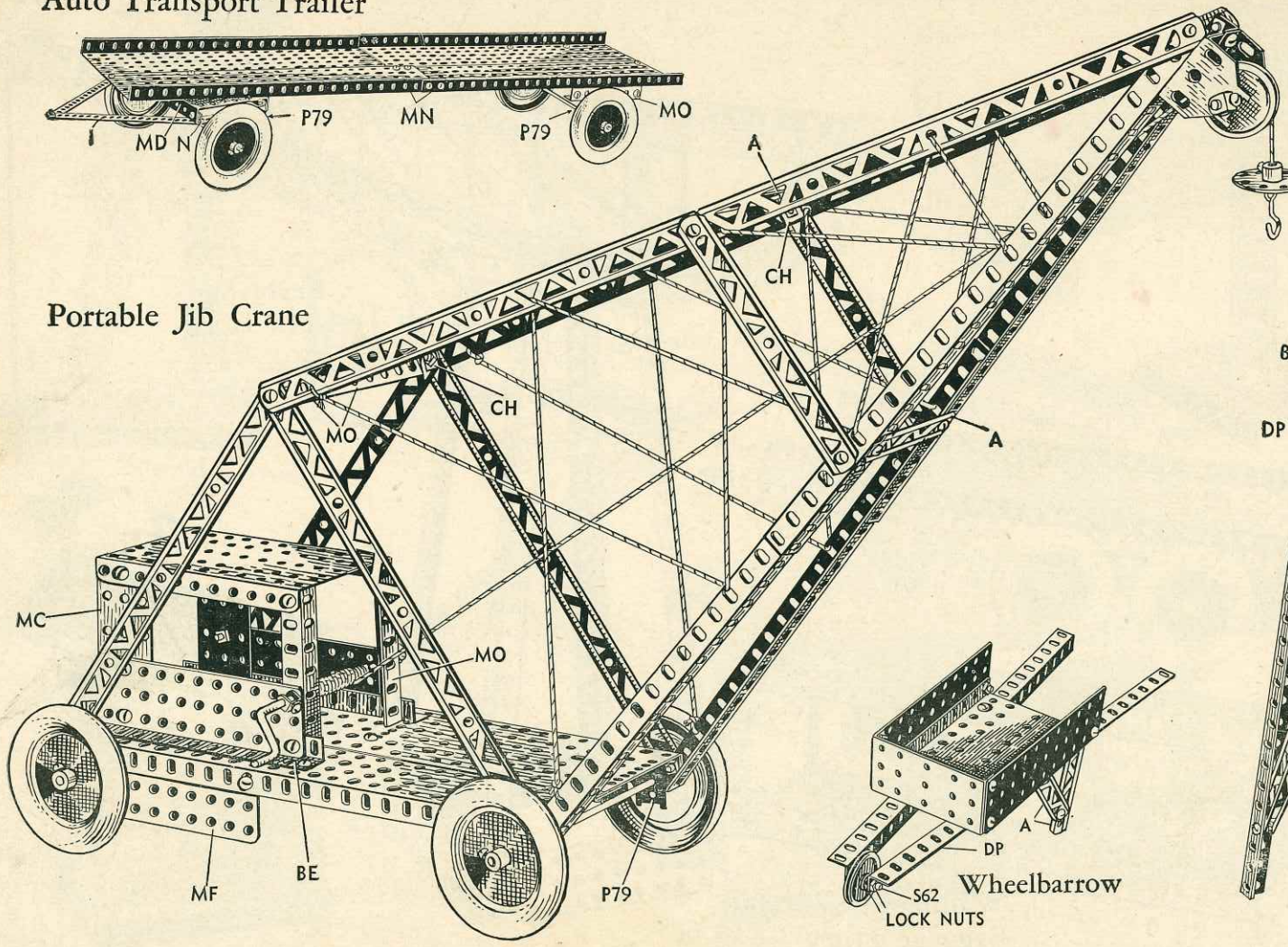
Models Built with No. 4½ Erector



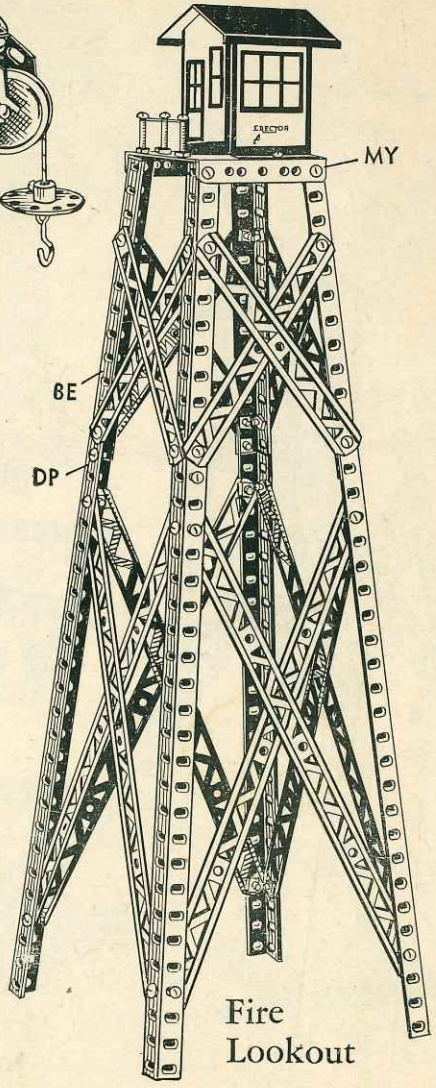
Models Built with No. 4½ Erector

Auto Transport Trailer

Portable Jib Crane



Wheelbarrow



Fire Lookout

Models Built with No. 6½ Erector

INTRODUCTION – ELECTRIC ENGINE POWER UNITS

The A-47 Electric Engine is rated at 120 volts, 60 cycle, 25 watt input.

The gear shift lever and gears in the Electric Engine are arranged so that the shaft that shifts to the right or to the left may be driven forward, reversed, or allowed to remain in neutral.

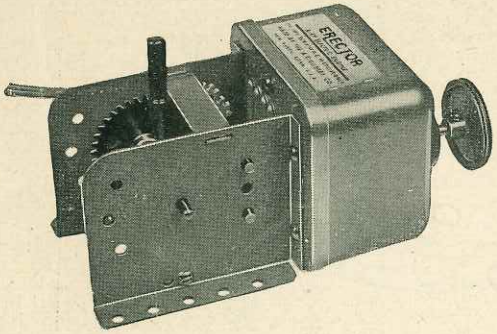
The A-47 motor is equipped with a worm drive which gives the greatest single reduction in gearing. The worm meshing with the 24 tooth worm gear on the countershaft of this motor gives a 24 to 1 reduction. This means that the speed of the countershaft is reduced 24 times from the speed of the worm shaft but the torque of the countershaft is increased 24 times that of the worm.

The shaft that shifts to the right or to the left is called the driven shaft. A 12 tooth gear on the countershaft (driver) meshing with the 36 tooth gear on the driven shaft must turn 3 revolutions to make the 36 tooth gear turn 1 revolution. Thus this gear ratio is 3 to 1.

Gears provide a means of transmitting power; controlling speed, and increasing or decreasing torque. If greater torque is desired, speed must be decreased; if more speed is desired, torque must be sacrificed for a given load.

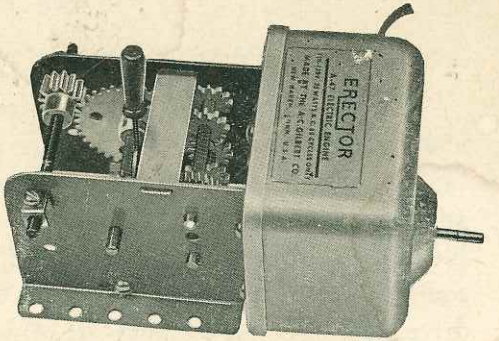
There are many combinations of gear ratios and gear trains that are possible with this motor. There are three sets of holes in the side plates where axles with gears may be attached.

CAUTION: Motor must be running to shift gears successfully. MUST be used on 60 cycle alternating current only.



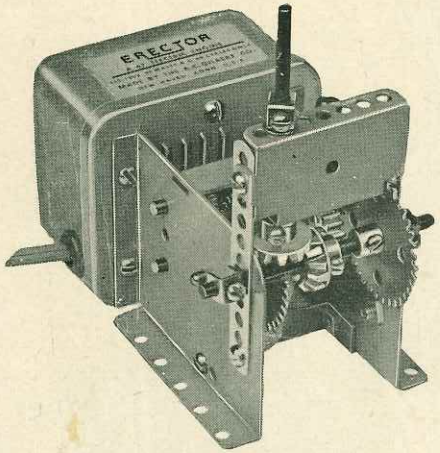
ELECTRIC ENGINE No. 1

A direct drive, as from the pulley on the motor shaft, gives a high speed, where little power is required, as in the case of windmills, etc.



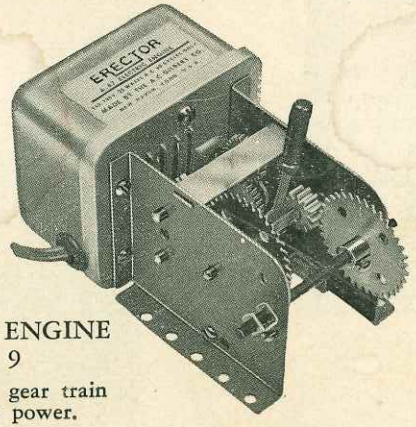
ELECTRIC ENGINE No. 8

A high speed gear train.



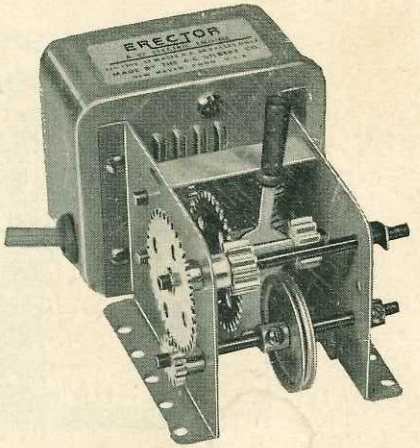
ELECTRIC ENGINE No. 11

A slow speed, vertical drive gear train.



ELECTRIC ENGINE No. 9

A low speed gear train with great power.



ELECTRIC ENGINE No. 12

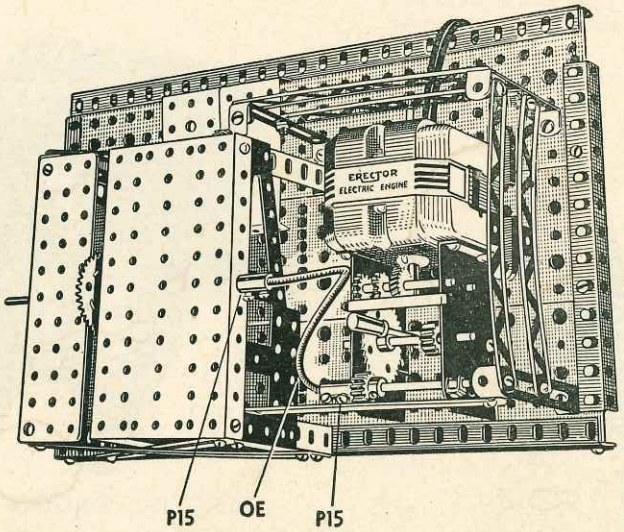
Super speed gear train for light loads.

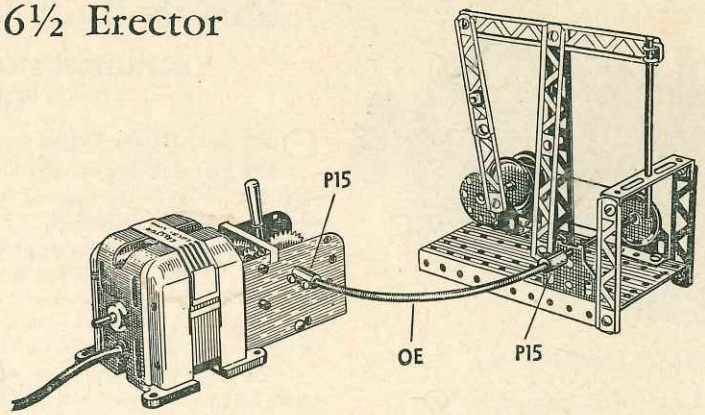
Models Built with No. 6½ Erector

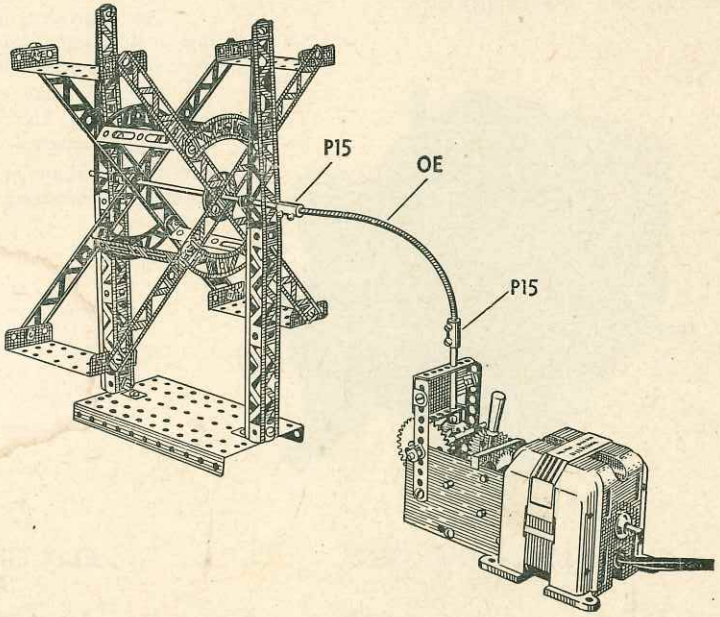
THE FLEXIBLE COUPLING

Flexible shafts are known throughout the world for their many varied uses. They are a means of transmitting power. They can be turned, twisted, bent into many shapes and will still run any model. Shown on this page are three suggested uses for the Flexible Coupling; one shows a small Well Pump being driven at a 45° angle, another shows a Ferris Wheel driven from a vertical drive, and the third shows an off-set reverse loop driving the Circular Saw model.

Almost every model in the manual can be adapted to use the flexible coupling for driving at angles up to 180°.







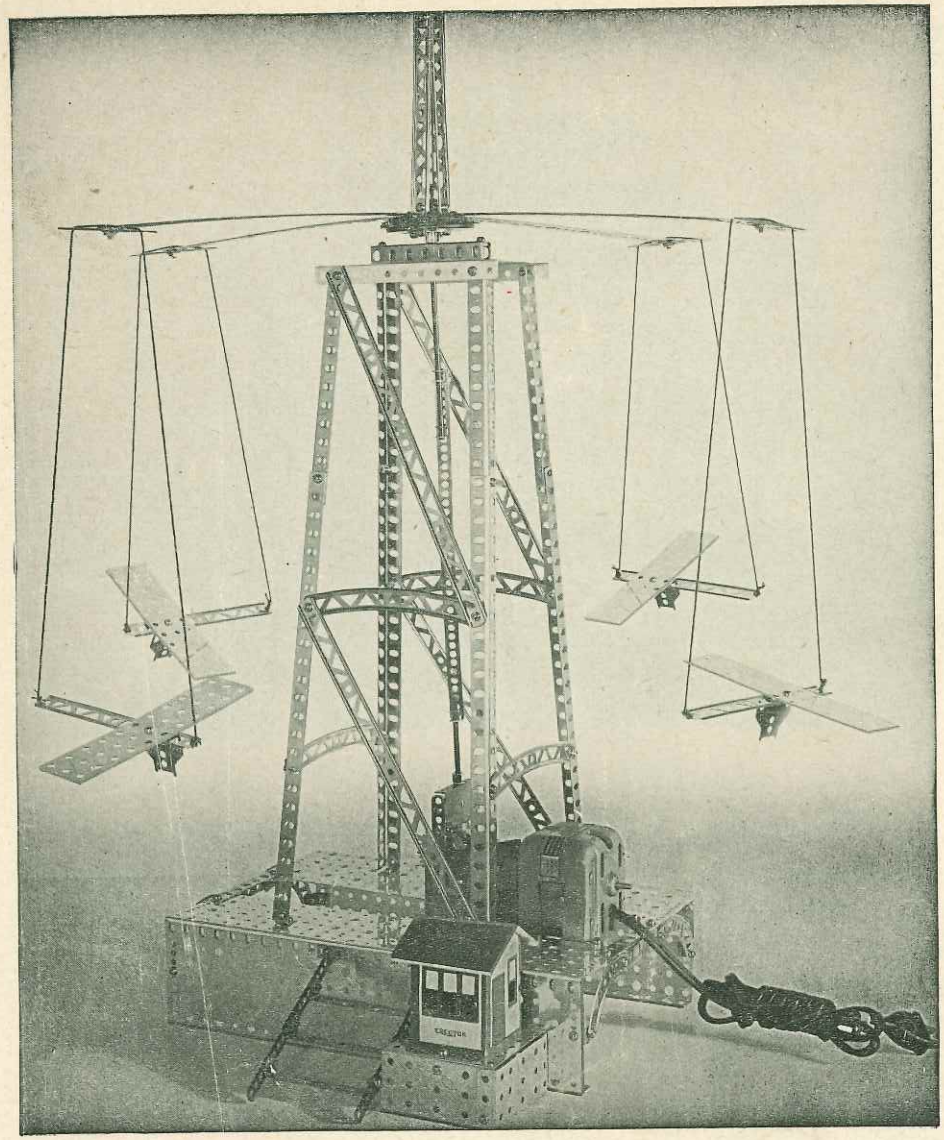


FIGURE 1

Models Built with No. 6½ Erector

Instructions for Building the 6½ Erector Airplane Ride Model

A fine action model to build is this Airplane Ride. It is continuous running and when the airplanes are winging their way around the tower, you can almost feel yourself piloting the airplane around and around.

THE COMPLETED MODEL

This is a very simple model to build but it has its difficulties. The base for the model is built with four (MN) 12″ base plates as shown in Figure 2.

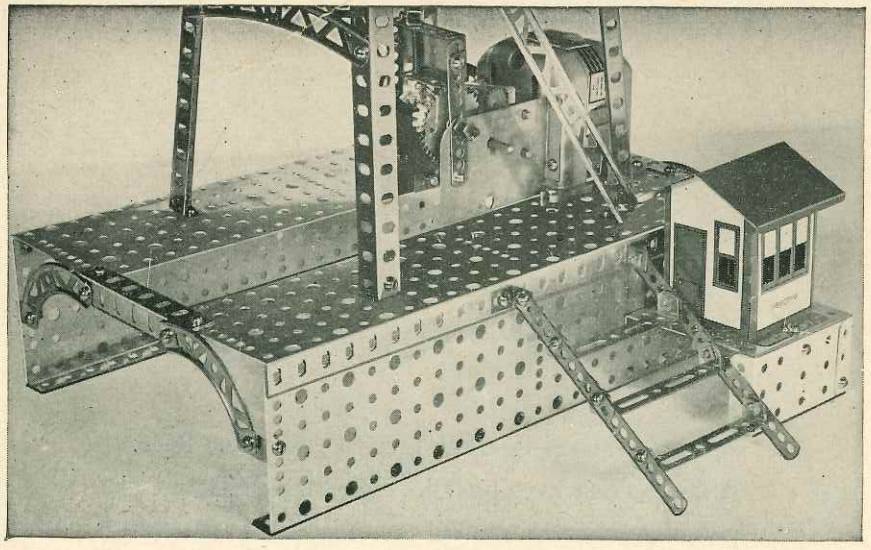


FIGURE 2

THE BASE

The base plates are assembled, two to each side and are spaced apart the width of an (MO) 3″ angle girder as shown in Figure 2. For bracing, (D) 2-½″ curved girders are used. These are fastened to the 3″ angle girder and to the vertical base plate with (CH) right angles.

The steps are made with an assembly of 1 (H) 11 hole strip, 1 (G) 7 hole strip and 1 (F) 5 hole strip on each side and 3 (N) long double angles for steps. The step assembly is fastened to the base plate with (CH) right angles.

The house is mounted on an assembly of 2 (MC) 1″ x 2-½″ base plates for sides and an (MY) 2-½″ x 2-½″ base plate for the top.

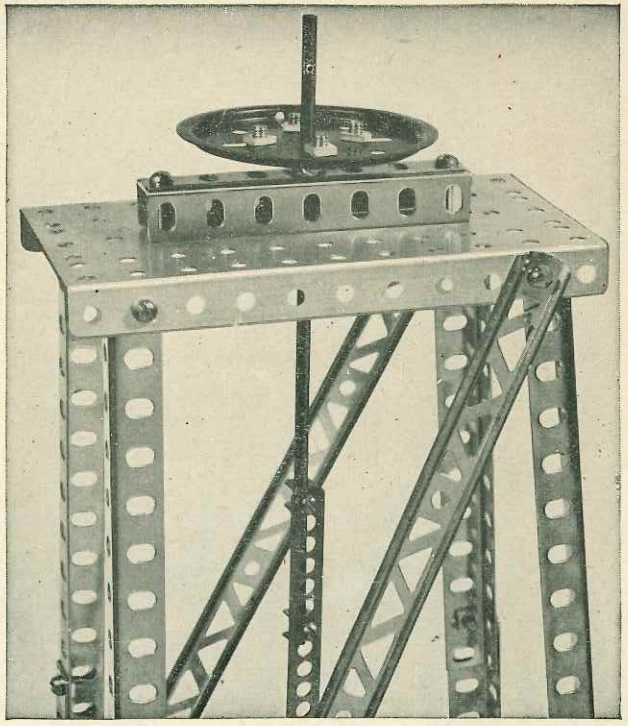


FIGURE 3

THE TOWER

The base of the tower is shown in Figures 1 and 2. Fastened to the base plates with (CH) right angles are 4 (DP) 12″ angle girders. On the top of these angle girders are fastened 4 (BE) 6″ angle girders, and then on the top of the four angle girder assemblies is fastened an (MD) 2-½″ x 5″ base plate. To the top of this base plate are fastened 2 (MO) 3″ angle girders which form a (U) shape with the open part of the (U) down on the base plate.

The tower is braced with (E) 5″ curved girders and (C) 10″ girders as shown in Figures 1, 2, and 3.

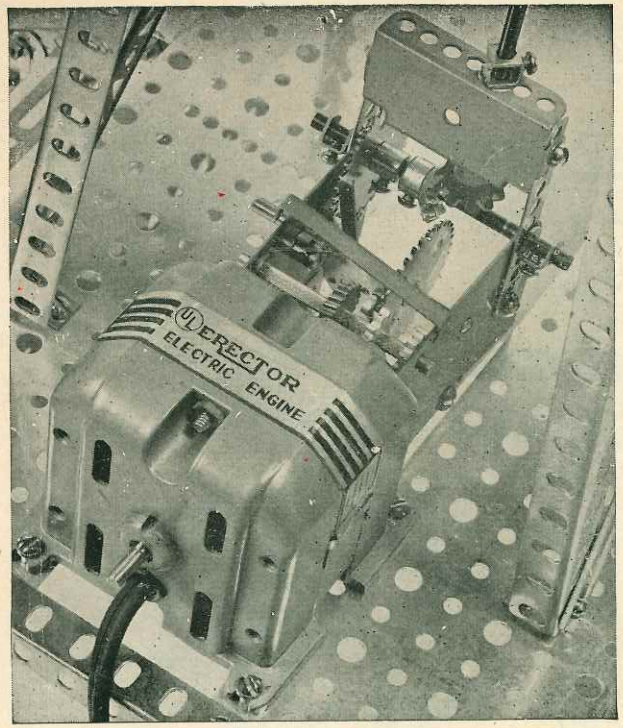


FIGURE 4

THE POWER UNIT

The power unit for this model is an A-49 Electric Engine geared up as Electric Engine No. 11 which is shown on the first page of the 6-1/2 section of the "How to Make 'Em Book". This power unit will provide a slow speed vertical drive gear train. The power unit is fastened to the model as shown in Figure 4.

The first vertical axle which passes through

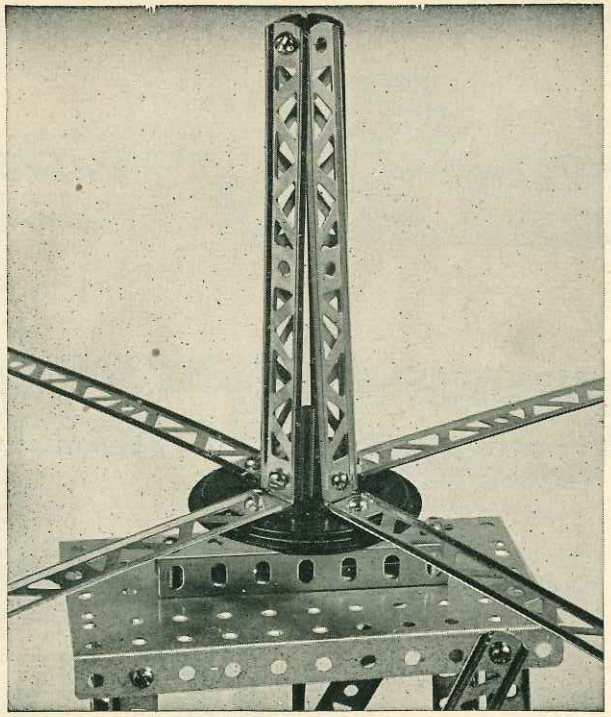


FIGURE 5

the bearing block is a 4" axle. On this axle is fastened a P37 collar and an (I) 21 hole strip. To this 21 hole strip is fastened a second (I) 21 hole strip which has on the top end two P37 collars and a (CZ) 7" axle which passes through the top (MD) 2-1/2" x 5" base plates and through the 2 (MO) 3" angle girders. By referring to Figure 3, you will see a (BN) regular turret plate fastened to a (BT) pierced disc which in turn is fastened to the 7" axle.

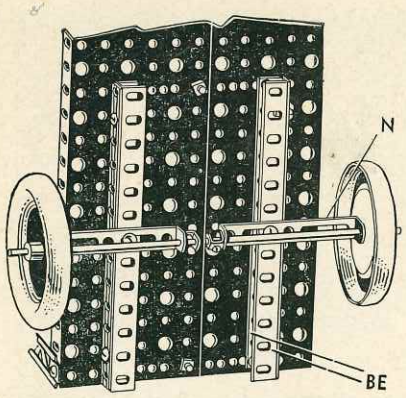
THE REVOLVING TOP

The revolving top is shown in detail in Figure 5. On a (BT) turret plate are fastened 4 (CH) right angles. To the vertical leg of the right angles are fastened 4 (B) 5" girders which are brought to the top to form a square. When the (CH) right angles are fastened to the turret plate, 4 (C) 10" girders are also fastened, each one at right angles to each other. On the ends of each 10" girder are fastened (A) 2-1/2" girders — see Figure 1. From these short girders are suspended the strings on which are hung the airplanes. Each airplane is made with a (B) 5" girder, a (MF) 1" x 5" base plate, and a P79 car truck as shown in Figure 1.

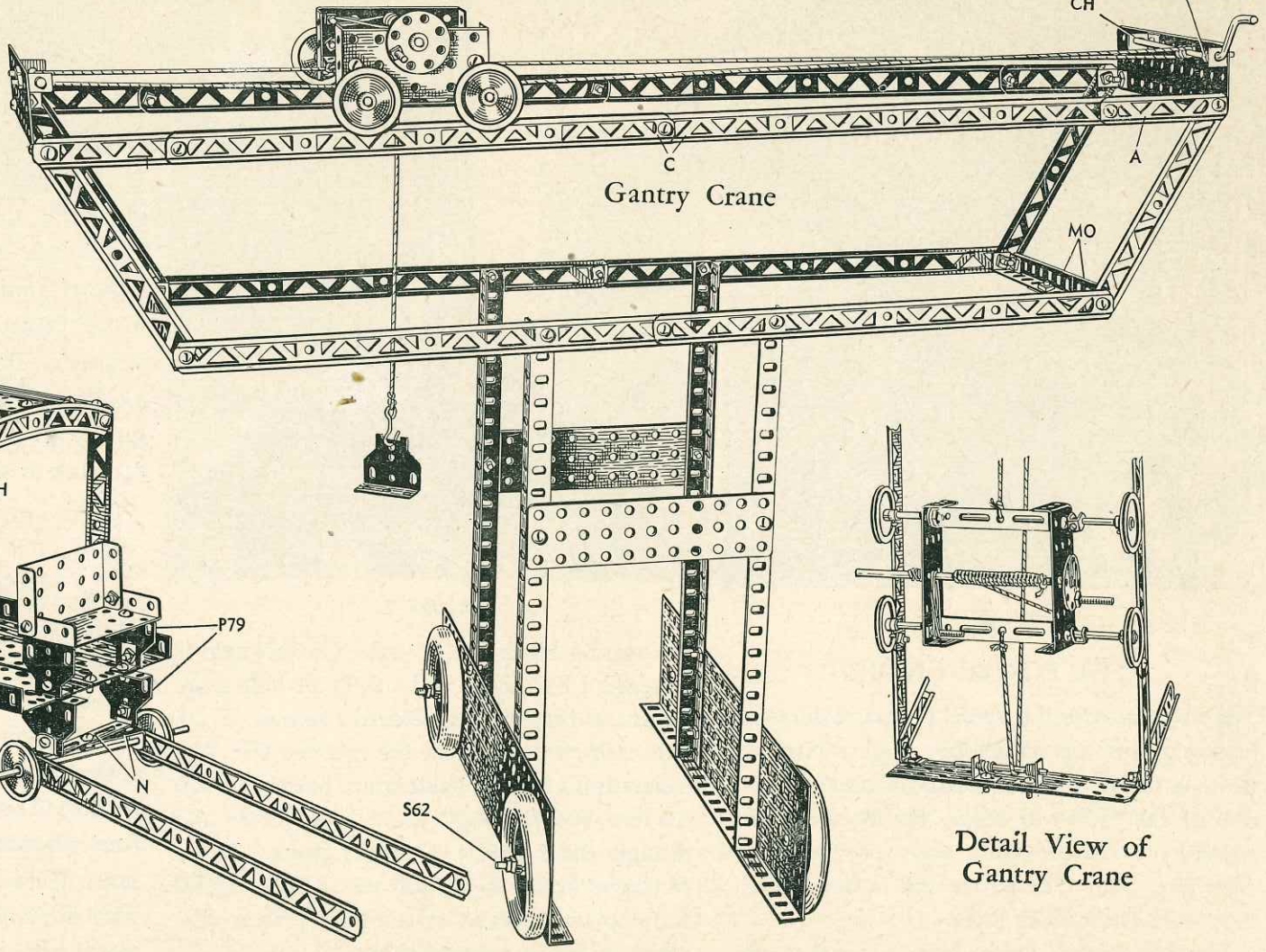
OPERATION OF MODEL

The two top turret plates are not fastened to each other. The bottom turret plate is fastened to the driving vertical shaft, by the (BT) pierced disc. The revolving top turret plate just rests on the bottom turret plate so that the top revolves by friction. This is done to prevent the airplanes from wrapping around the tower when the motor stops. With the friction drive the revolving top with airplanes will coast to a stop when the motor is shut off.

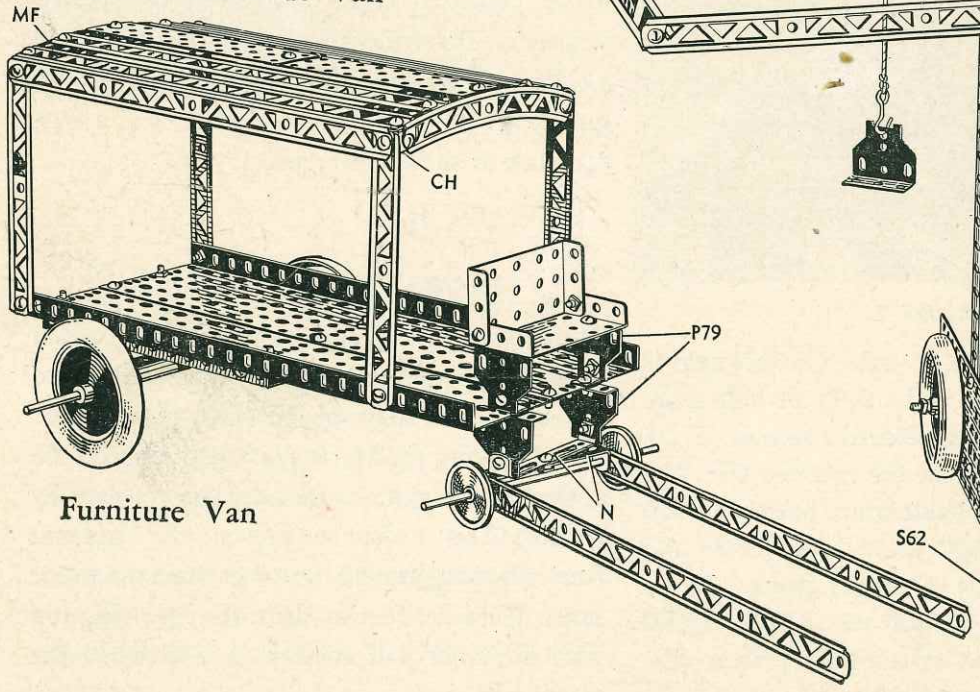
Models Built with No. 6½ Erector



Detail of Furniture Van



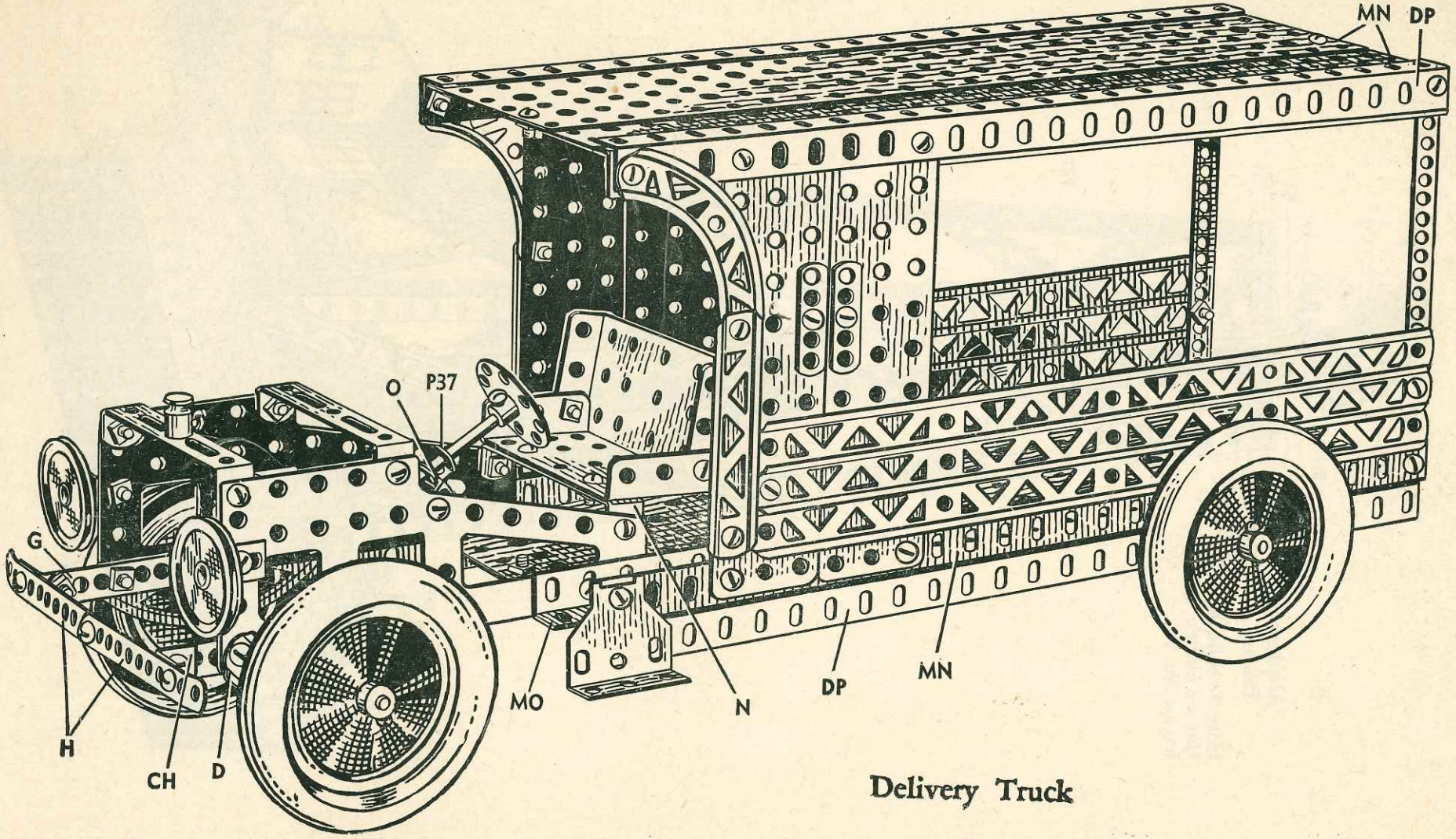
Gantry Crane



Furniture Van

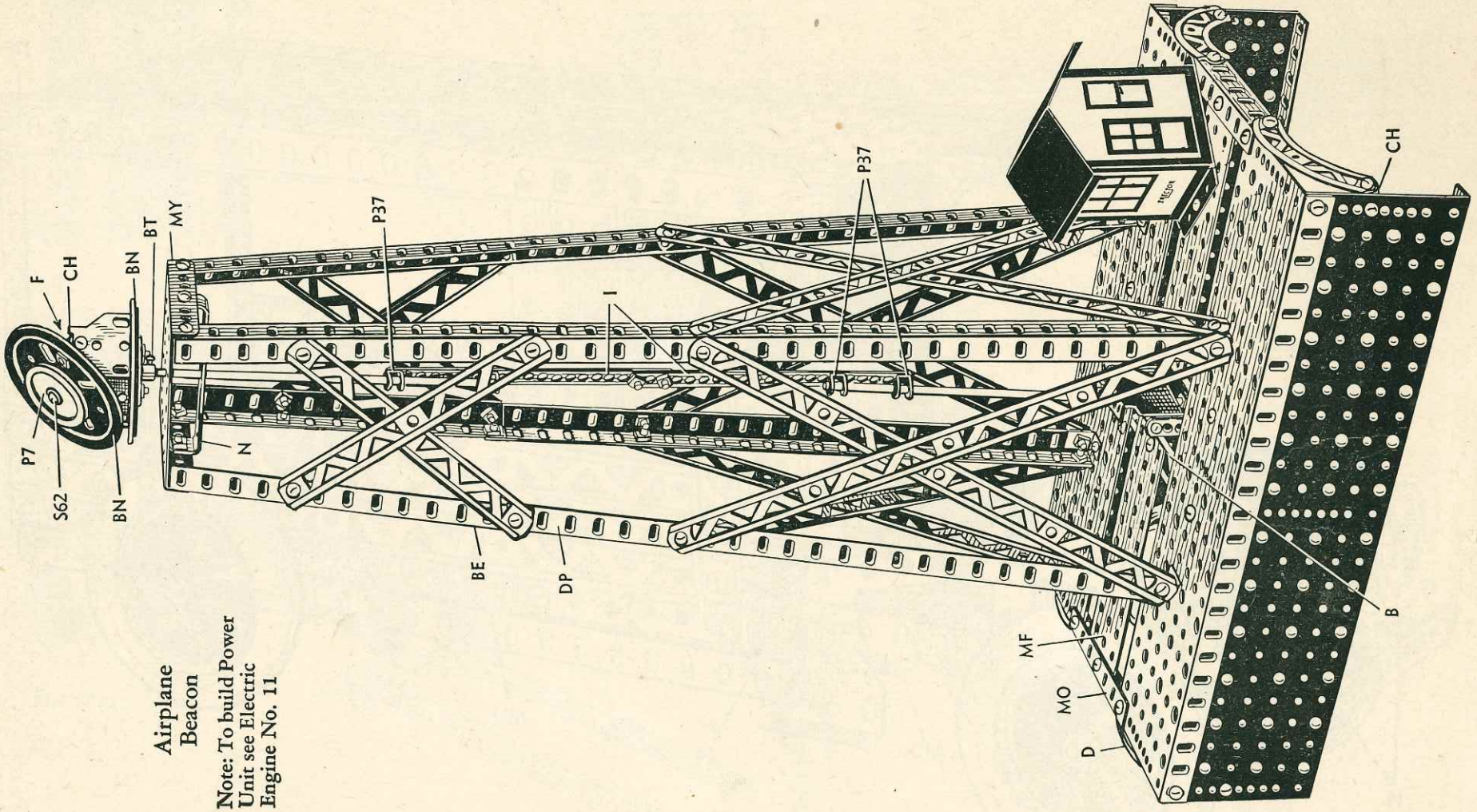
Detail View of Gantry Crane

Models Built with No. 6½ Erector



Delivery Truck

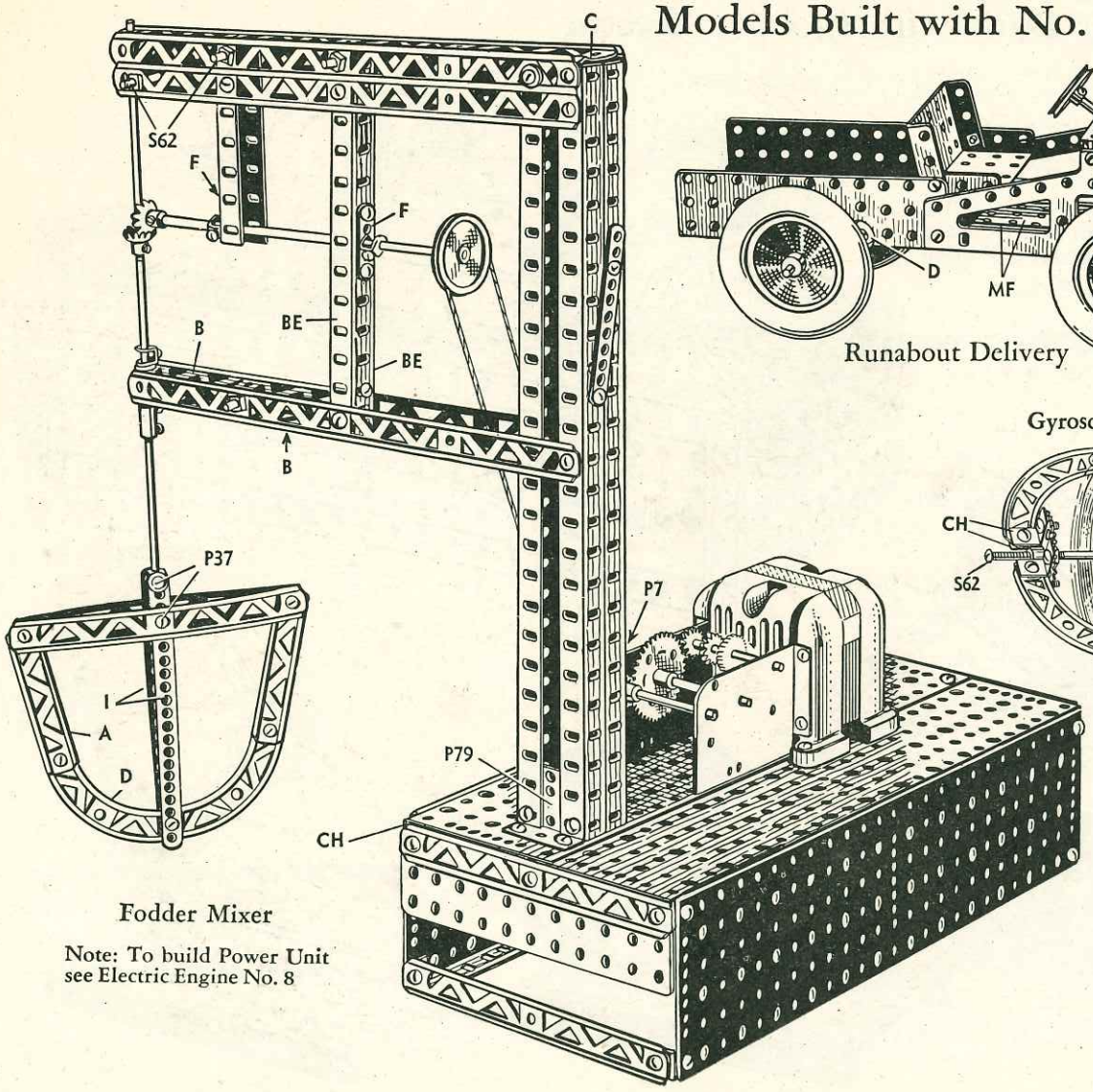
Models Built with No. 6½ Erector



Airplane
Beacon

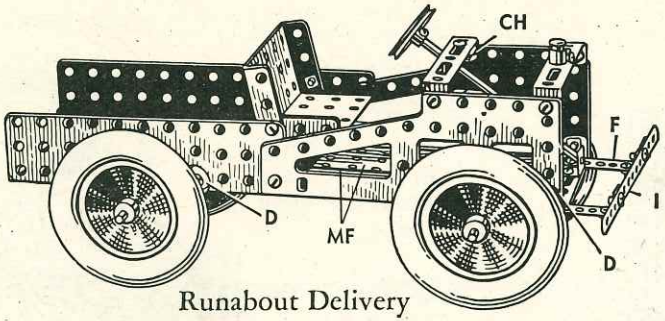
Note: To build Power Unit see Electric Engine No. 11

Models Built with No. 6½ Erector



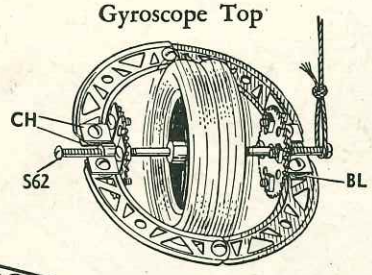
Fodder Mixer

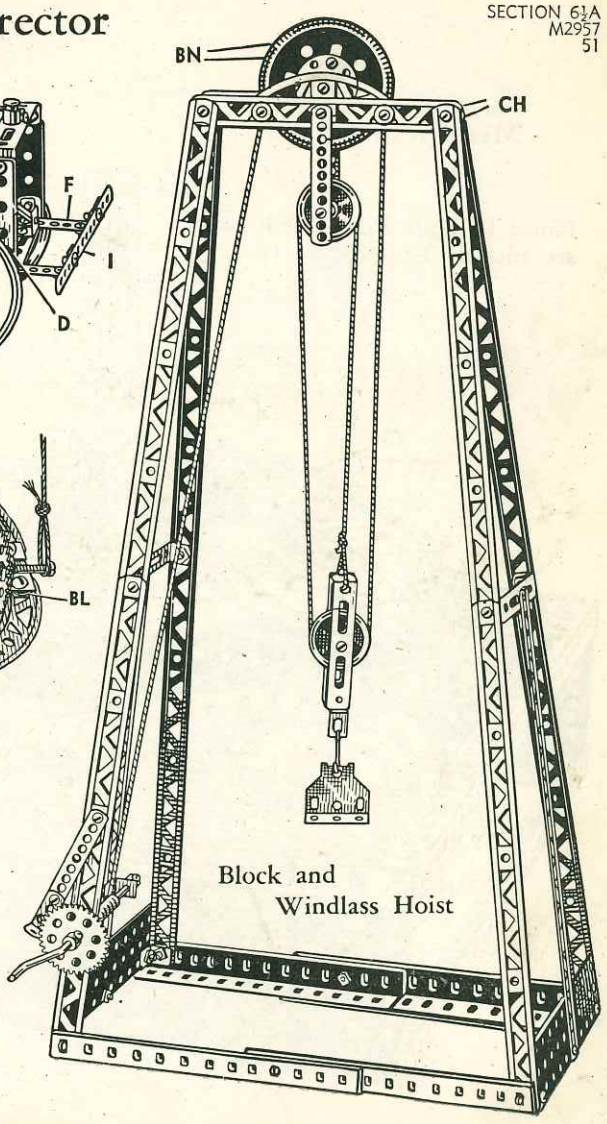
Note: To build Power Unit see Electric Engine No. 8



Runabout Delivery

Gyroscope Top



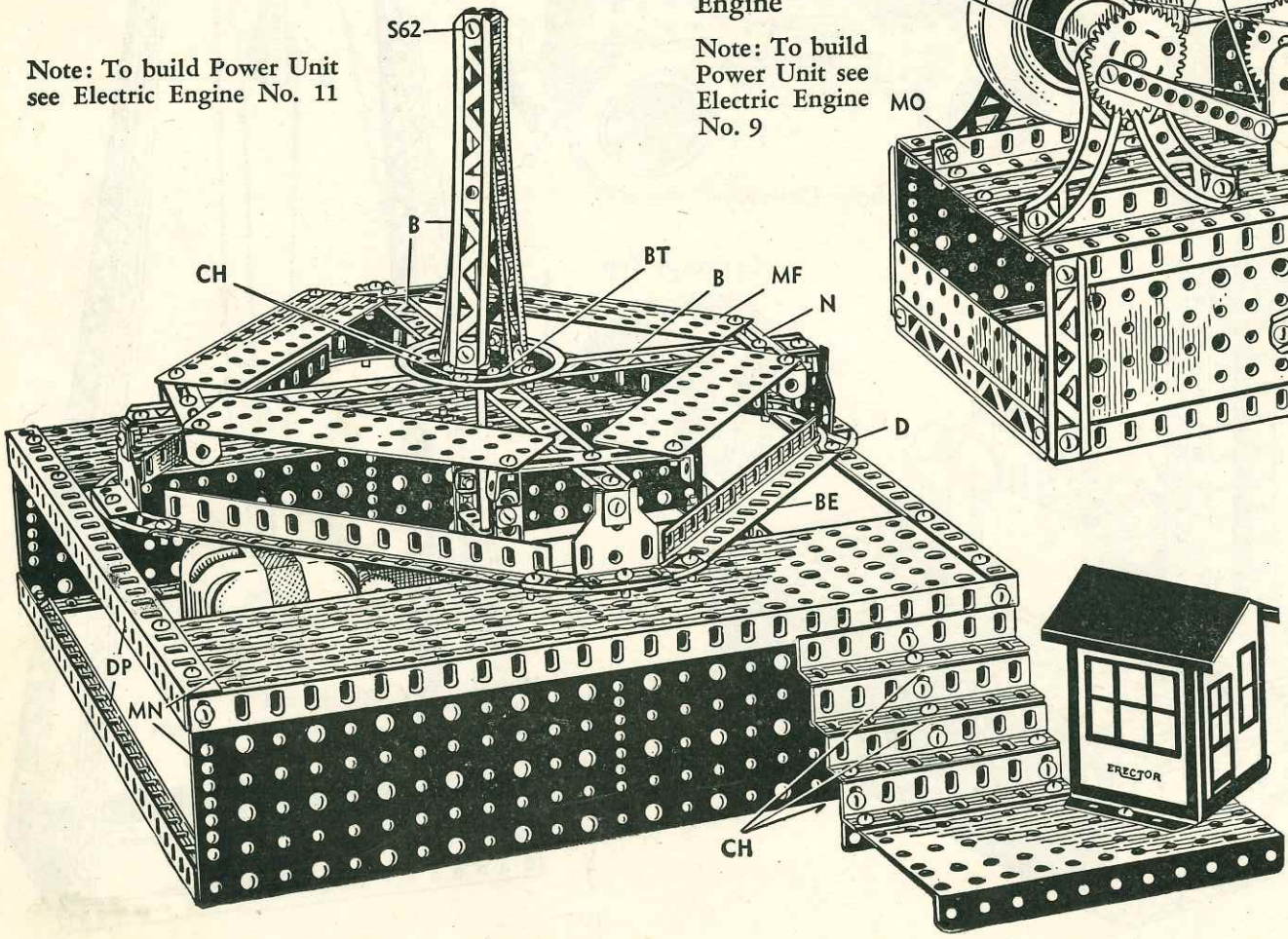


Block and Windlass Hoist

Models Built with No. 6½ Erector

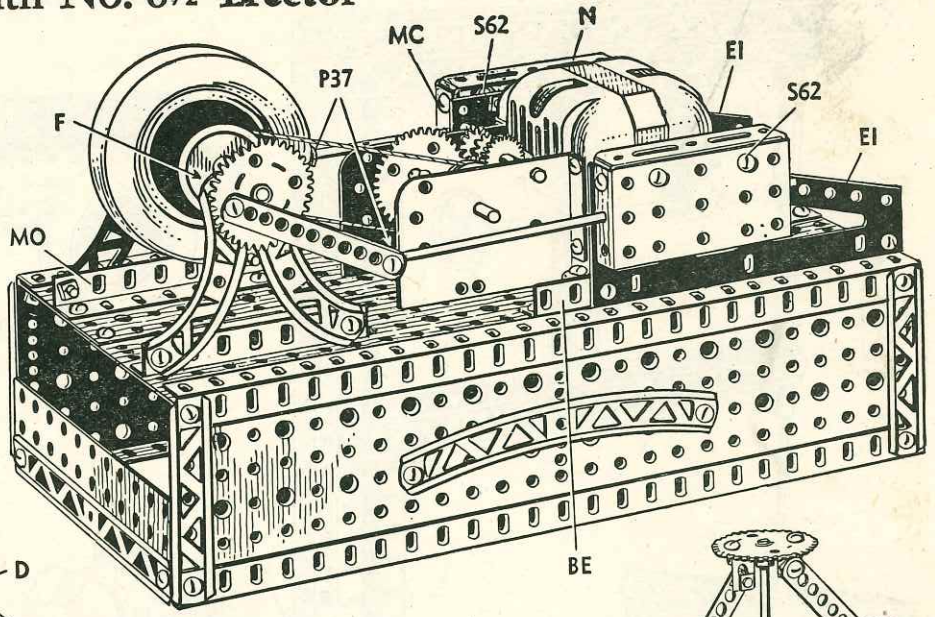
Merry-go-round

Note: To build Power Unit see Electric Engine No. 11

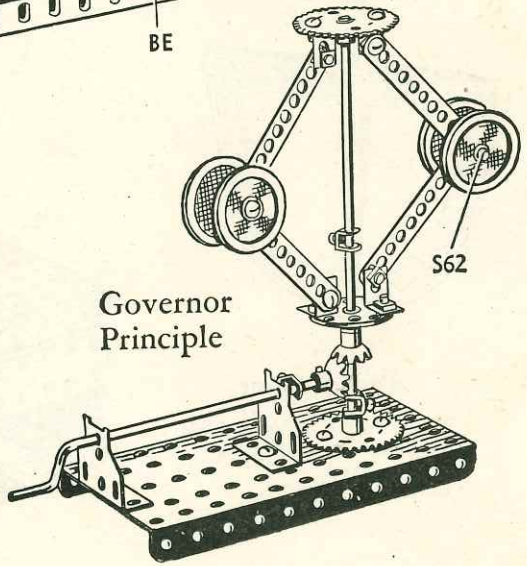


Horizontal Engine

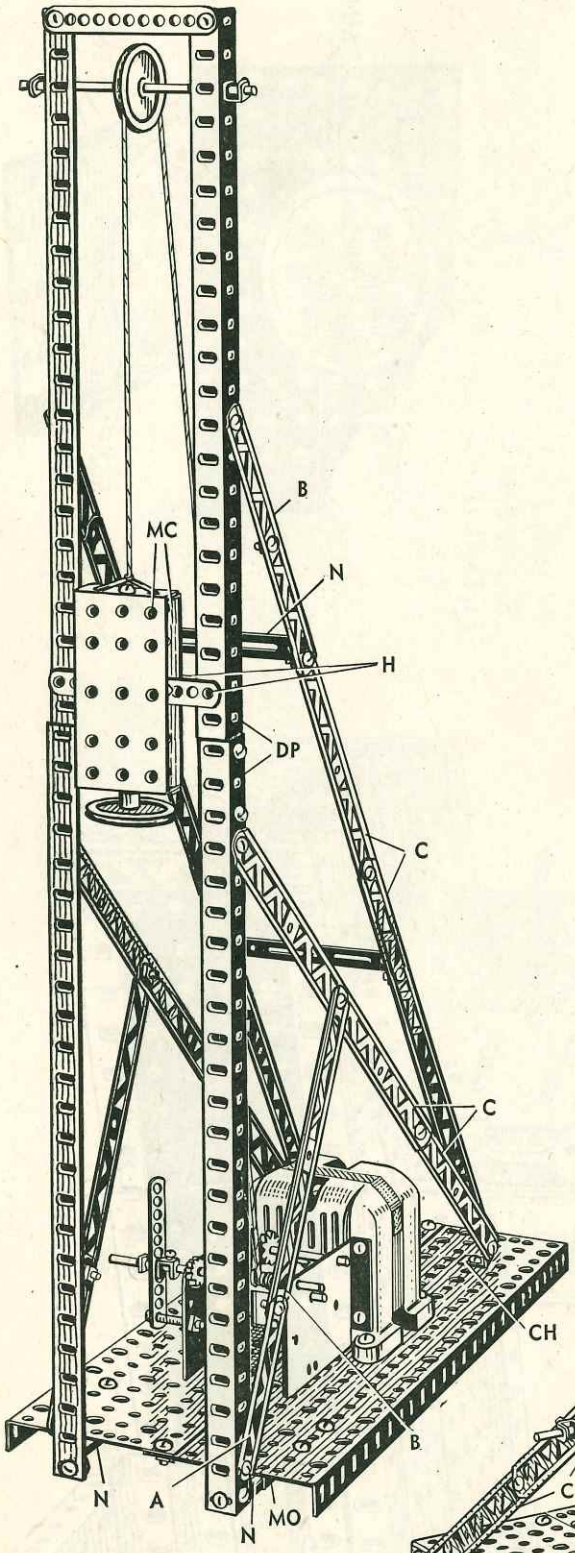
Note: To build Power Unit see Electric Engine No. 9



Governor Principle



Models Built with No. 6½ Erector

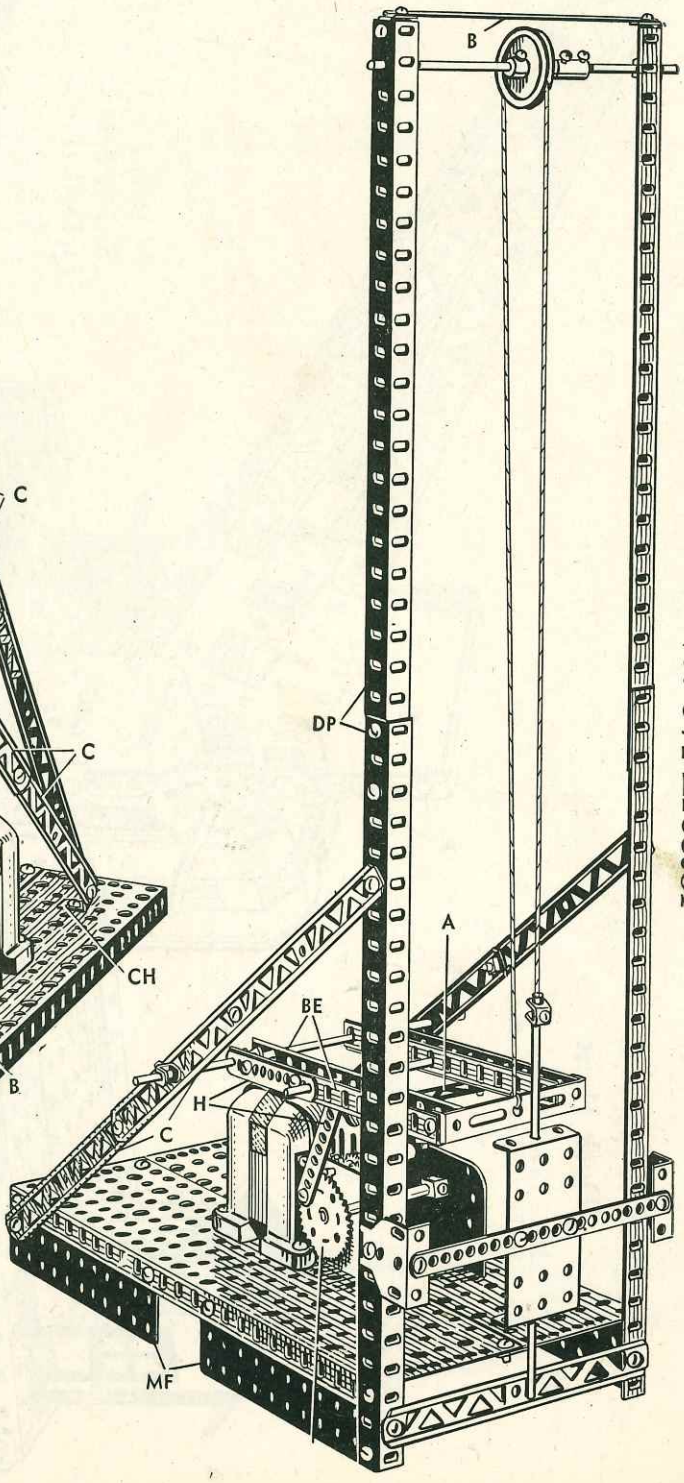


Pile Driver

Note: To build Power Unit see Electric Engine No. 9

Well Driver

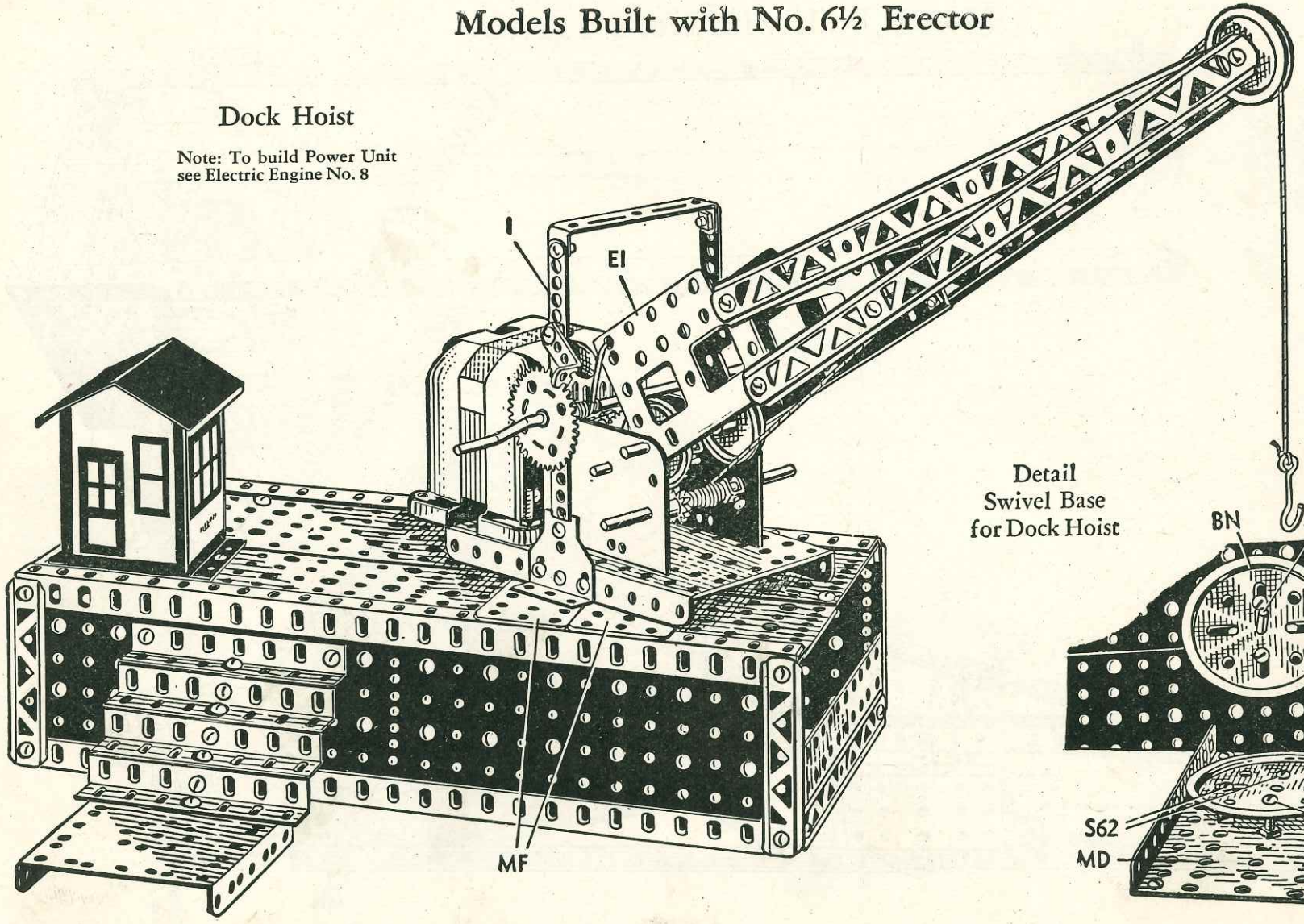
Note: To build Power Unit see Electric Engine No. 9



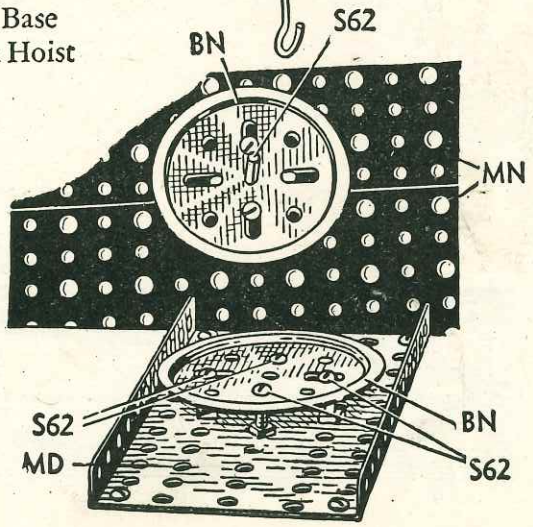
Models Built with No. 6½ Erector

Dock Hoist

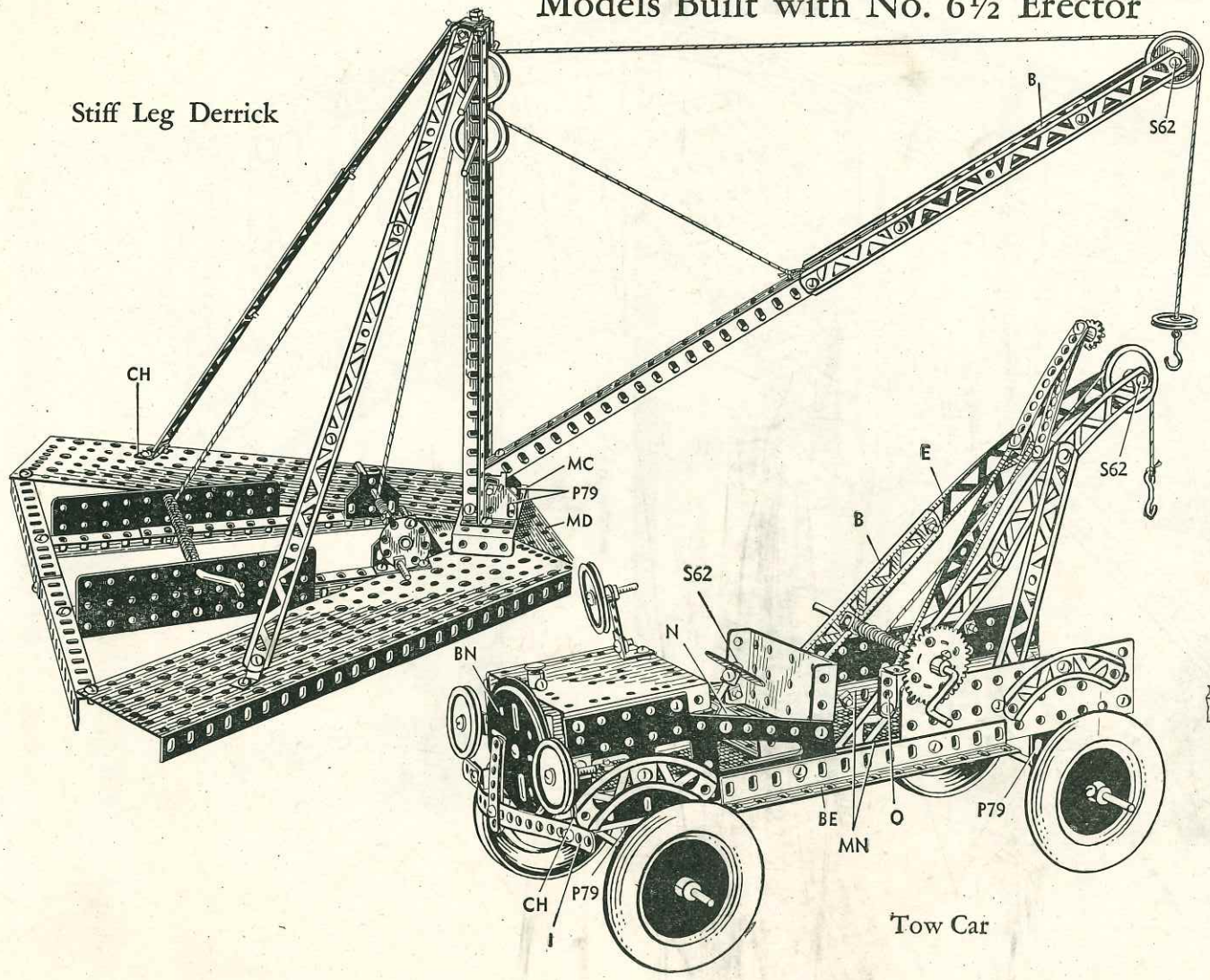
Note: To build Power Unit see Electric Engine No. 8



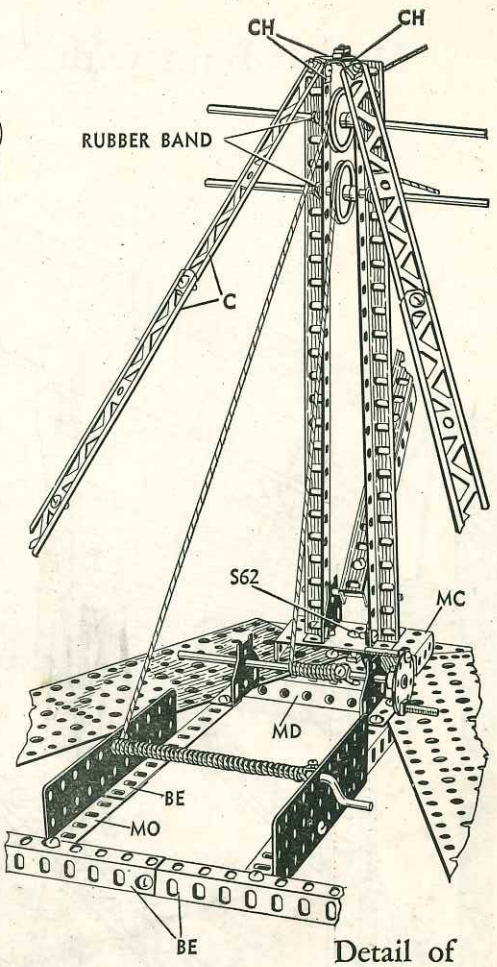
Detail
Swivel Base
for Dock Hoist



Models Built with No. 6½ Erector

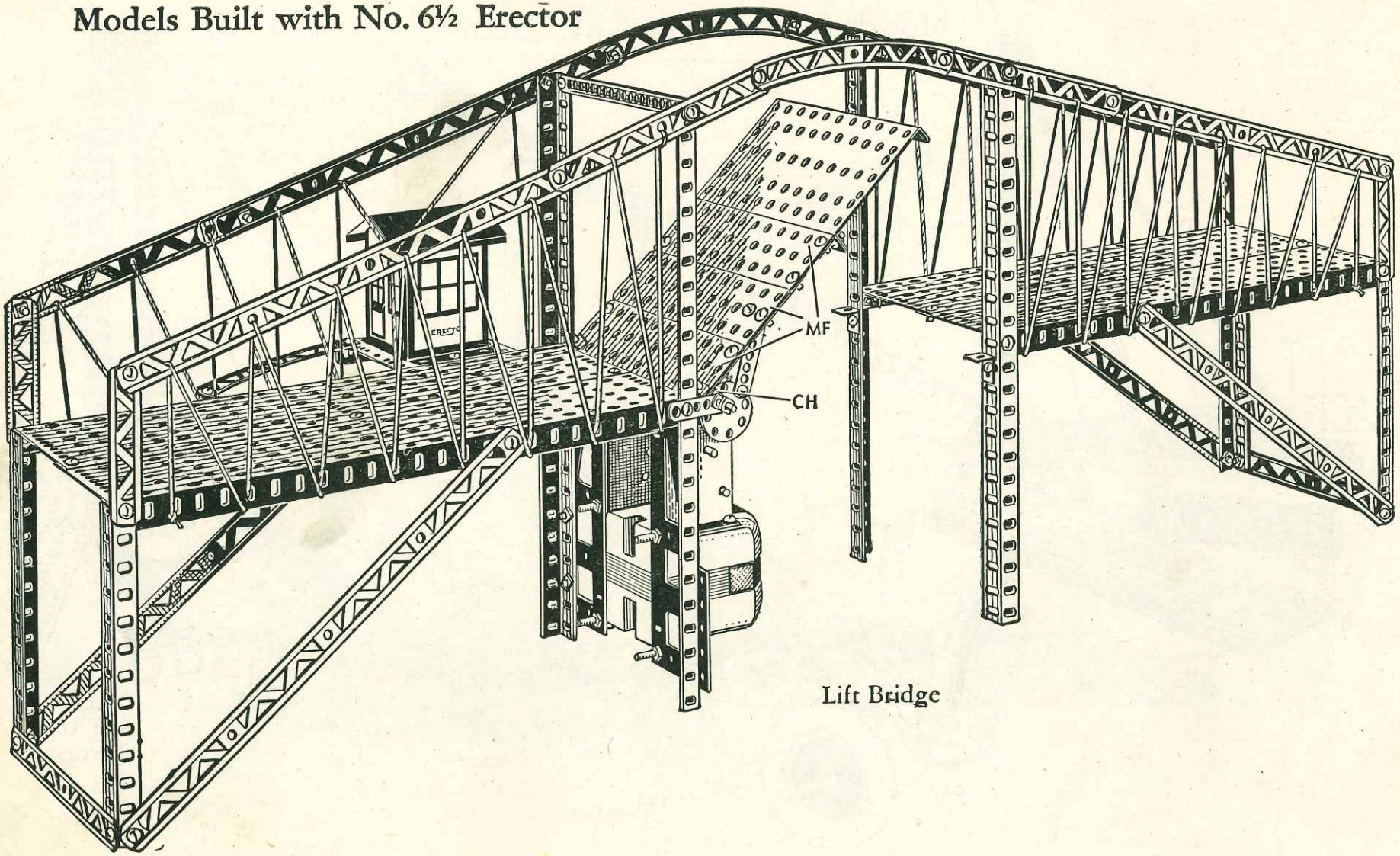


Tow Car



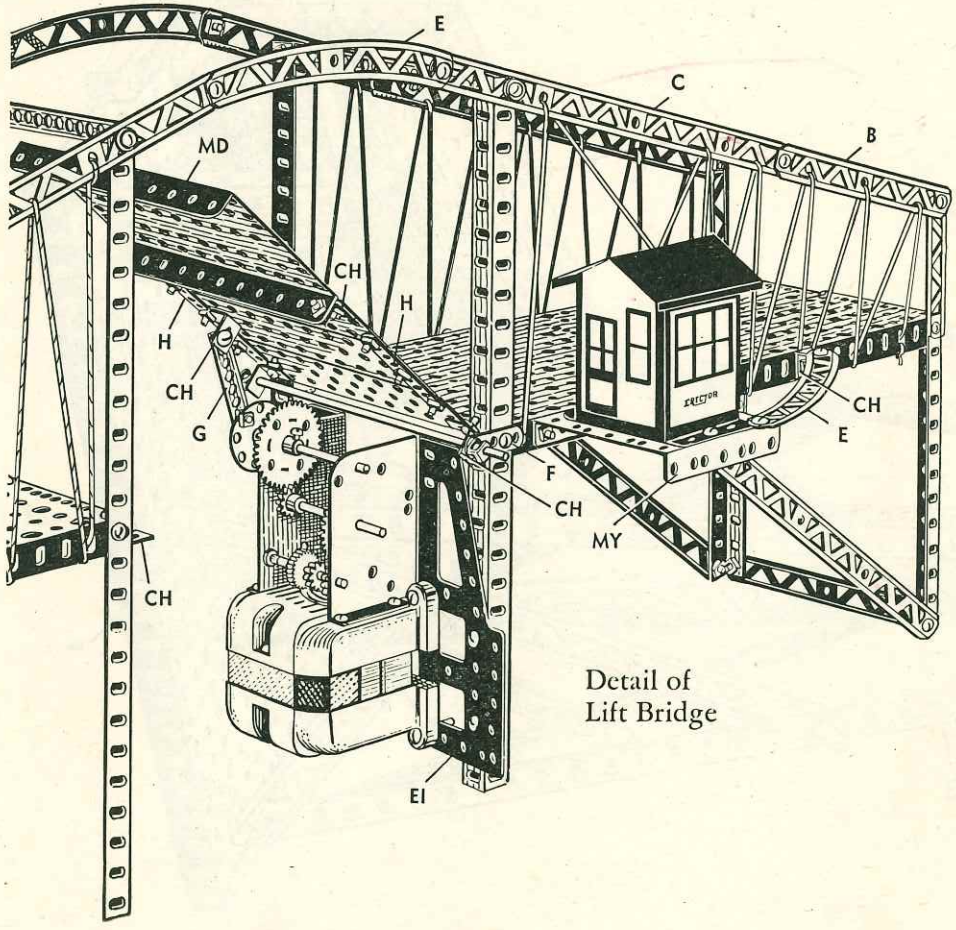
Detail of Stiff Leg Derrick

Models Built with No. 6½ Erector



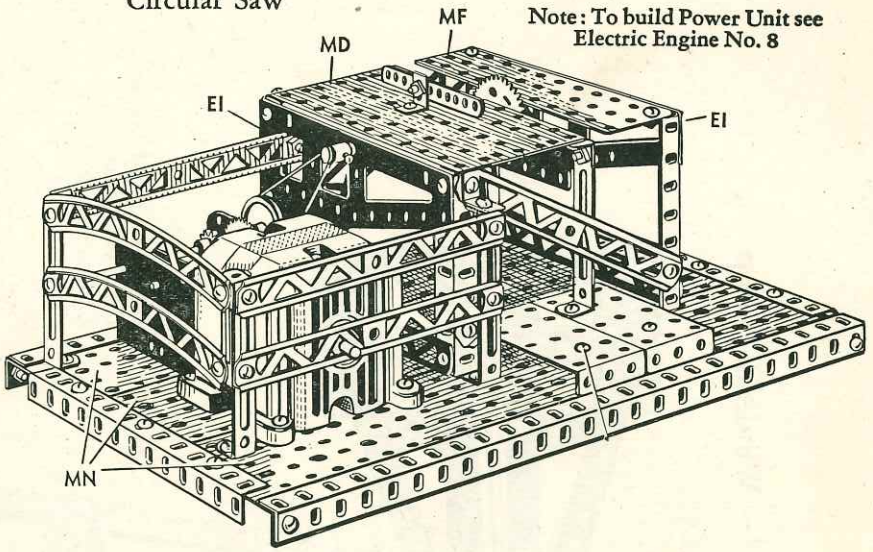
Lift Bridge

Models Built with No. 6½ Erector



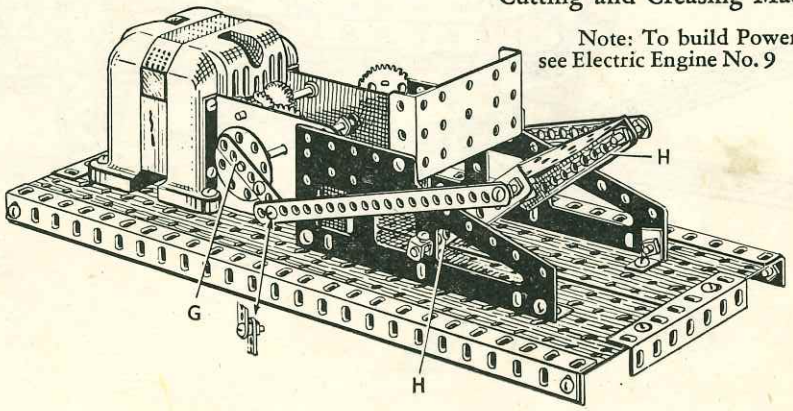
Detail of
Lift Bridge

Circular Saw



Note: To build Power Unit see Electric Engine No. 8

Cutting and Creasing Machine

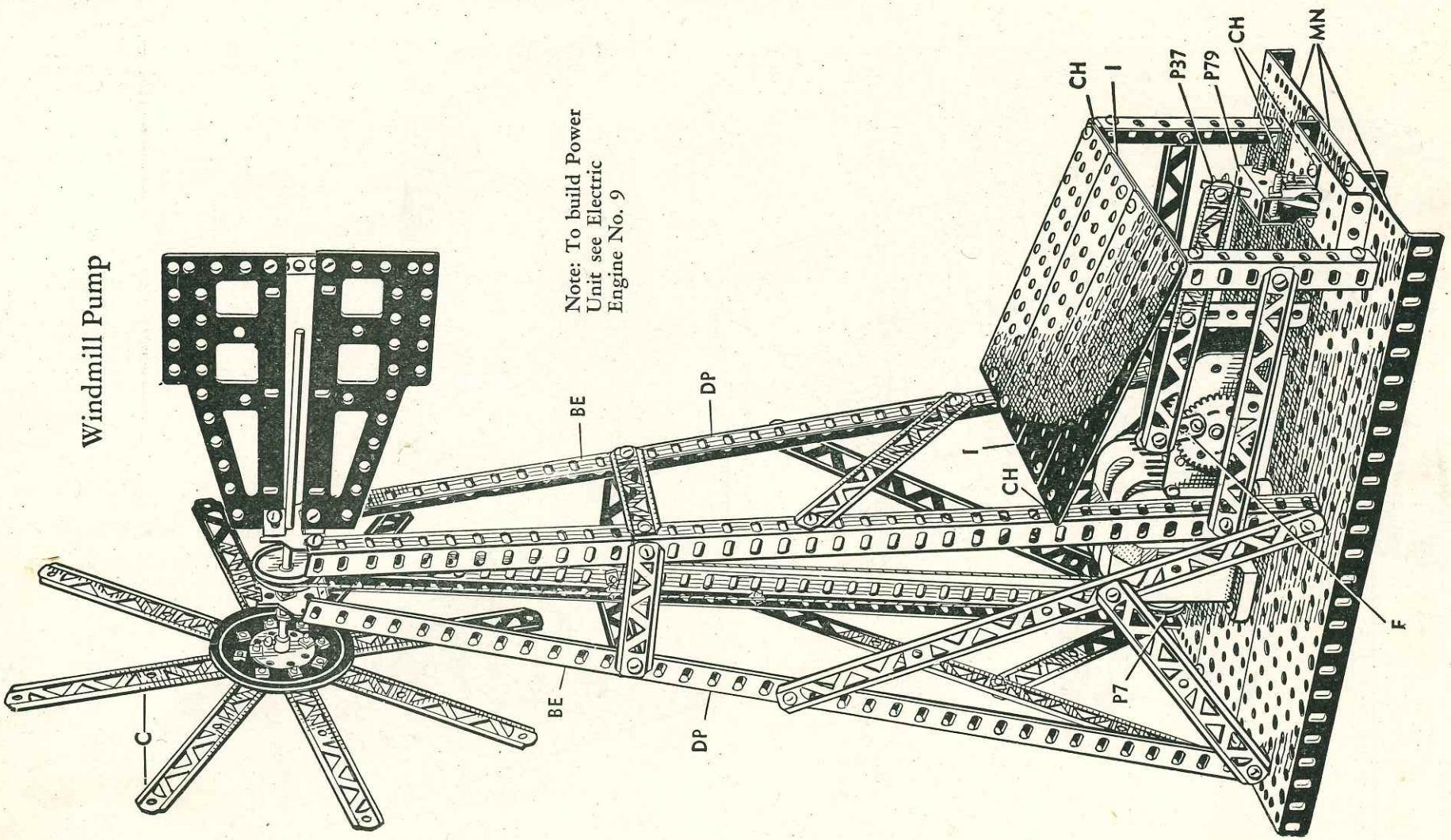


Note: To build Power Unit see Electric Engine No. 9

Models Built with No. 6½ Erector

Windmill Pump

Note: To build Power Unit see Electric Engine No. 9



Models Built with No. 7½ Erector

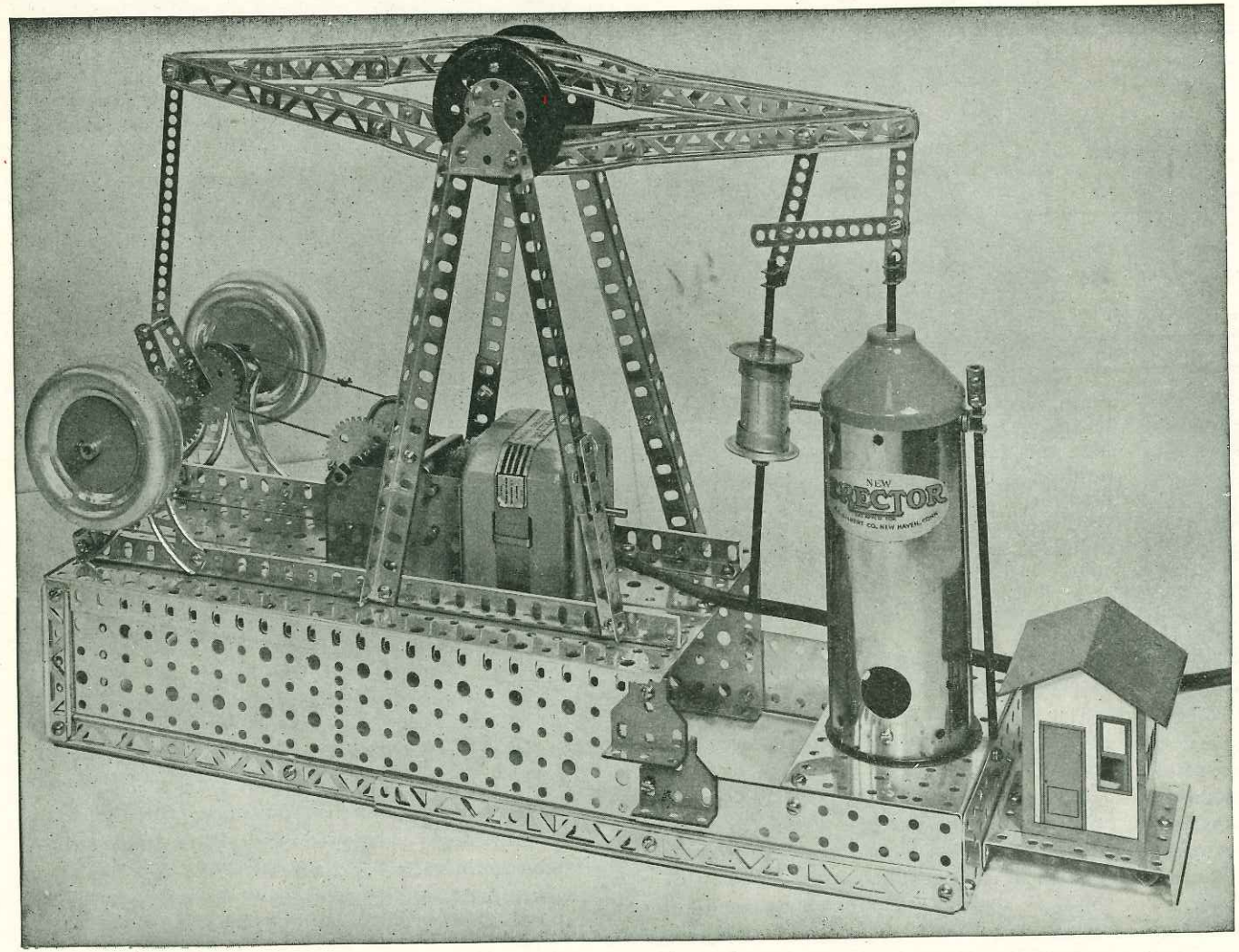
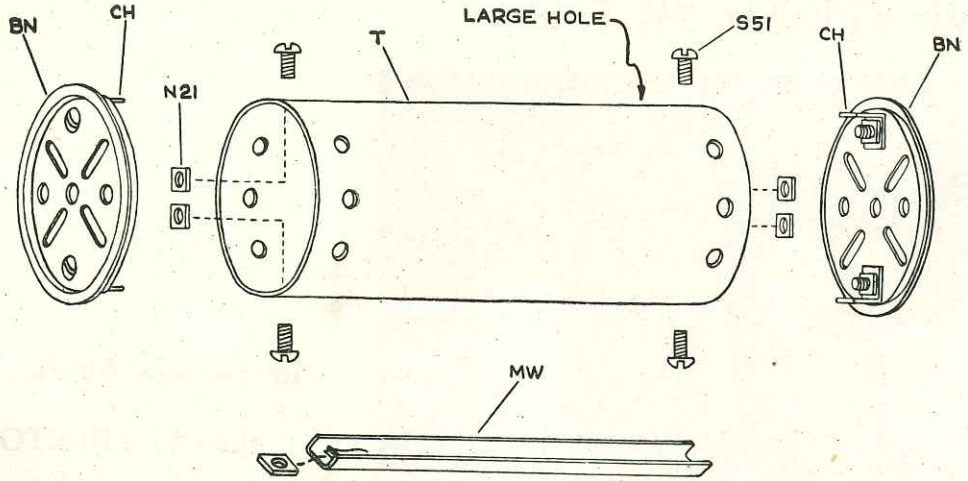


FIGURE 1.

Instructions for Building the 7½ ERECTOR Walking Beam Engine

When James Watt invented the steam engine, its first use was to operate a Walking Beam Engine similar to the one you are about to build.



The boiler and boiler parts are found in the No. 7½ Erector set and successive sets.

On various models it is necessary to assemble the boiler (T) with turret plates (BN). Close boiler by overlapping edges and fastening with S51 screw and N21 nut. Assemble two (CH) angles to turret plates (BN). Hold boiler as shown in diagram, place assembled turret plate inside left end. Using nut holder, (MW) inside boiler to hold the N21 nuts, fasten turret plate to boiler. Remove nut holder from inside boiler and place second assembled turret plate inside right end of boiler. Using your finger through the large hole in boiler hold the N21 nuts to fasten turret plate to boiler.

THE COMPLETED MODEL

It is best to build this model as well as all other models from the bottom up. The base for this model is shown in Figure 1. The sides are each (MN) 12″ base plates, the top is made from 2 (MN) 12″ base plates. In Figure 2, you will see an (MF) 1″ x 5″ base plate fastened on the end to the sides of the base with (CH) right angles. On each side of the base is fastened an (A) 2½″ girder and 2 (C) 10″ girders.

On one side of the base are fastened 2 (P79) car trucks for steps.

The mounting for the boiler is made by extending the base with (MF) 1″ x 5″ base plates. Across the ends of these two base plates is fastened an (MF) 1″ x 5″ base plate. The top of this platform is an (MD) 2½″ x 5″ base plate.

The platform for the house is an (MY) 2½″ x 2½″ base plate fastened to the rear (MF) 1″ x 5″ base plate.

In Figure 1, you will see 2 (DP) 12″ angle girders fastened along the top base plates. On these angle girders is mounted the inverted "V" frame which supports the beam. This inverted "V" is built with (MO) 3″ angle girders on the bottom and (BE) 6″ angle girders mounted on top of the 3″ angle girders as shown in Figure 4. A P79 car truck is used to tie the "V" together as shown in Figure 3.

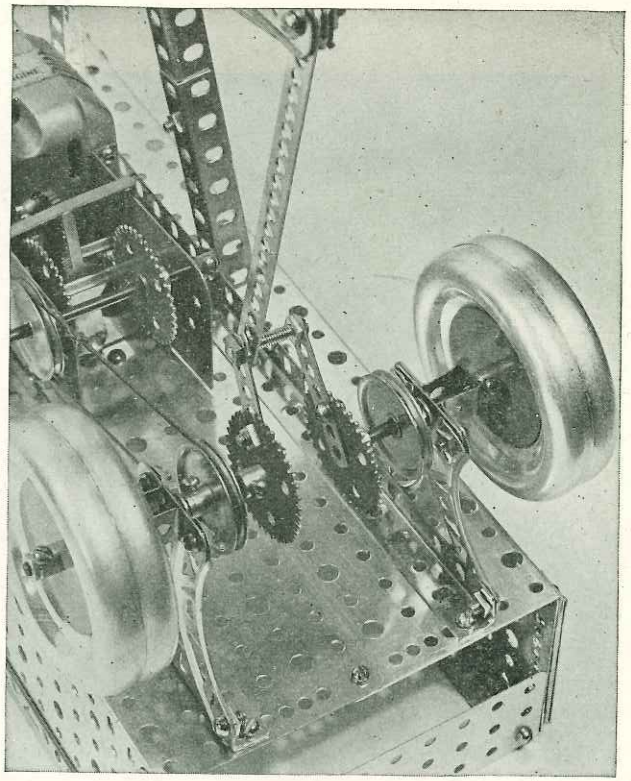


FIGURE 2

THE FLYWHEEL UNIT

In Figure 2 you will see a detail of the flywheel assembly. To the (DP) 12″ angle girders are fastened 4 (D) 2½″ curved girders. Across the top of these curved girders is fastened an (F) 5 hole strip and (P20) 5 hole strip — formed. On each side there are (AS) 2⅞″ axles on which are fastened the 2 (MH) 3″ disc wheels, P7 pulley and the (CJ) 36 tooth gear. On each 36 tooth gear is fastened a (G) 7 hole strip which is used as the eccentric arm to make the beam move in a see-saw fashion.

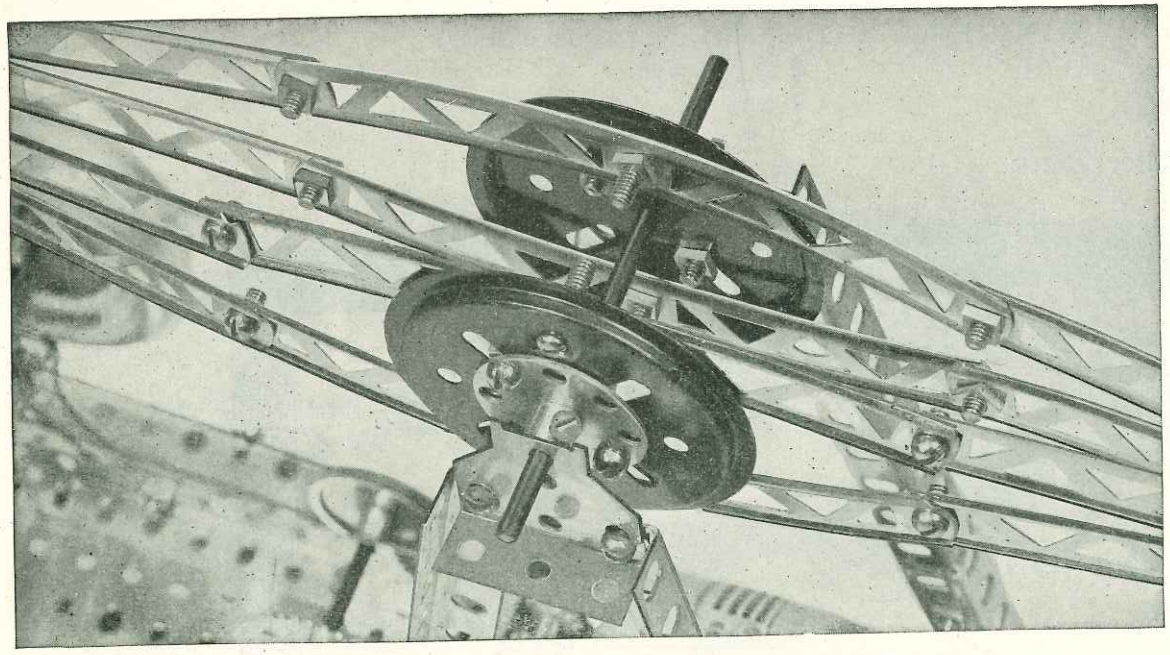


FIGURE 3

DETAILS OF WALKING BEAM

In Figure 1, you will see the entire Walking Beam and in Figure 3 is shown a detail of the beam. To the (BN) turret plates are fastened (BT) pierced discs which are used to hold the unit on the (AT) 4″ axles which also passes through the P79 car trucks. On each turret plate is fastened 2 (E) 5″ curved girders. To these curved girders are fastened (B) 5″ girders. The four 5″ girders are brought together at each end. On the boiler end is fastened an (H) 11 hole strip which is free to move. On the other end of the beam is fastened an (I) 21 hole strip which is also free to move. The beam should now be mounted on the inverted "V" and the end of the 21 hole strip attached to the flywheel unit. Special care should be taken at this point to check to see that everything is free by turning the flywheel unit by hand. The beam should move easily in see-saw fashion.

The (T) boiler should now be mounted on its base with a (BN) turret plate on the bottom and a (U) boiler top at the top. The little cylinder is made with a (W) smoke stack fastened to the boiler with an (S62) 8-32 x 7/8″ screw. Two (Z) flanged wheels are put on either end of the smoke stack.

A (CZ) 7″ axle is allowed to move free inside the two (Z) flanged wheels on the smoke stack. At the top of this axle is fastened a P37 collar and an (H) 11 hole strip. This strip is fastened to the beam in location shown in Figure 1 with an (S62) screw. Across the two (H) 11 hole strips fastened to the beam is attached an (H) 11 hole strip in location shown in Figure 1. These three strips should be free to move. On the end of the end 11 hole strip is fastened a P37 collar and a (AT) 4″ axle which passes through the top hole in the boiler top. Another (CZ) 7″ axle is used for mounting a P15 coupling which denotes the whistle on the boiler. This 7″ axle is held to the boiler with a P37 collar.

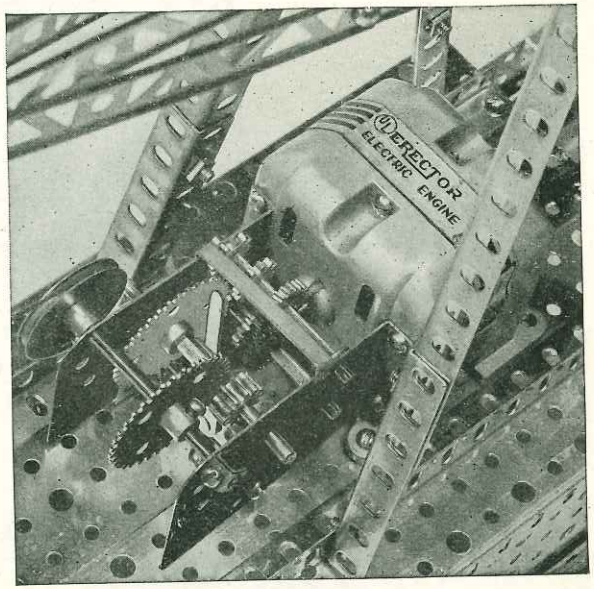
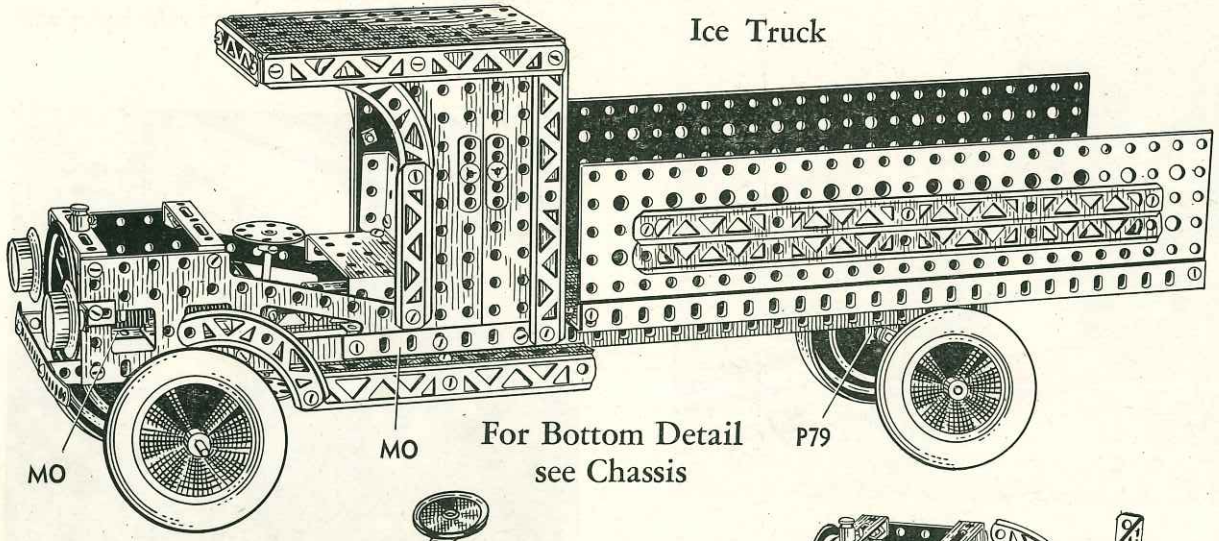


FIGURE 4

THE POWER UNIT

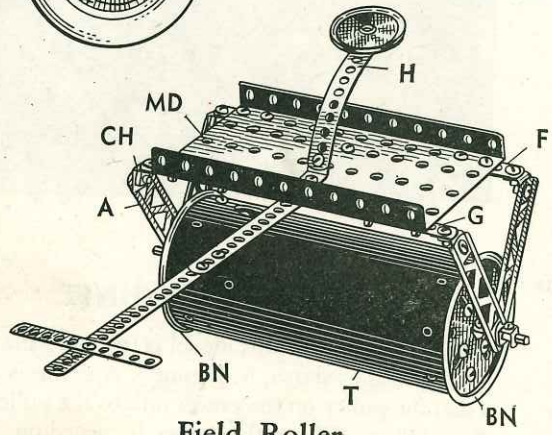
The power unit for this model is the A-49 Electric Engine geared as shown in Figure 4. A string is fastened from the pulley on the power unit to the pulley on the flywheel unit. When the engine is turned on, it drives the flywheel unit, which in turn drives the walking beam. The beam operates the piston in the cylinder and the boiler.

Models Built with No. 7½ Erector

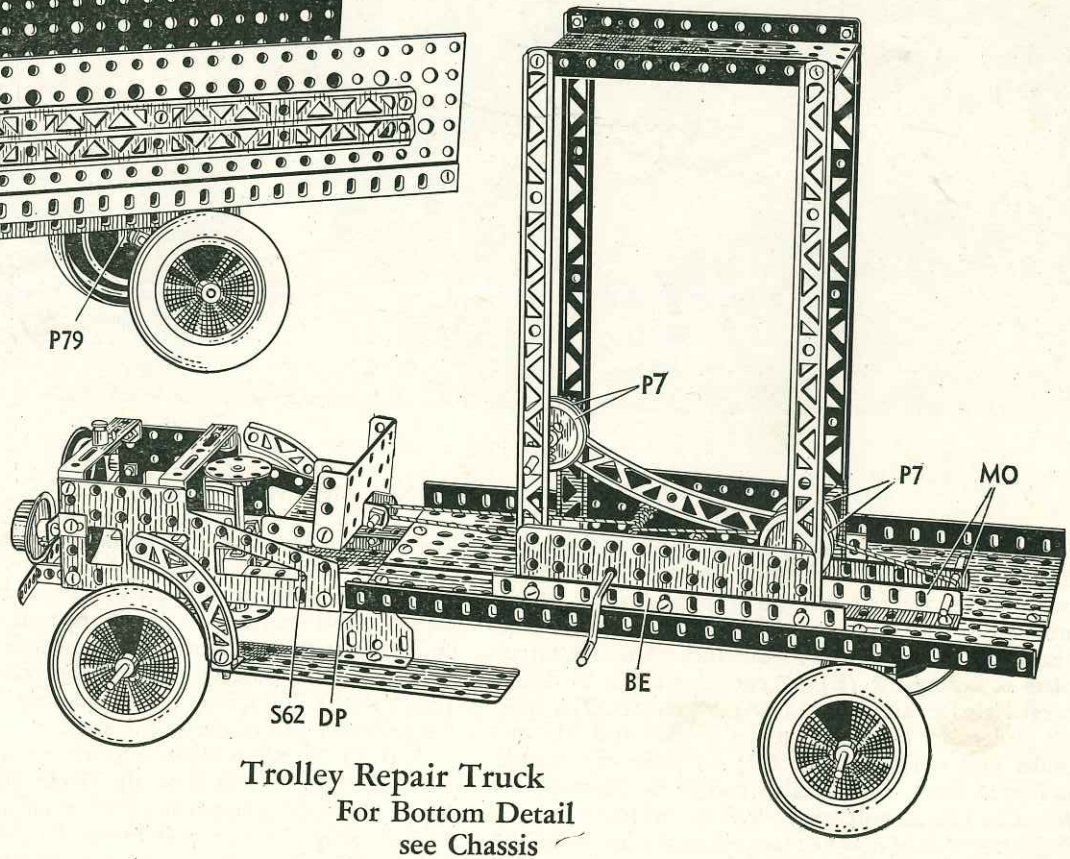


Ice Truck

For Bottom Detail
see Chassis

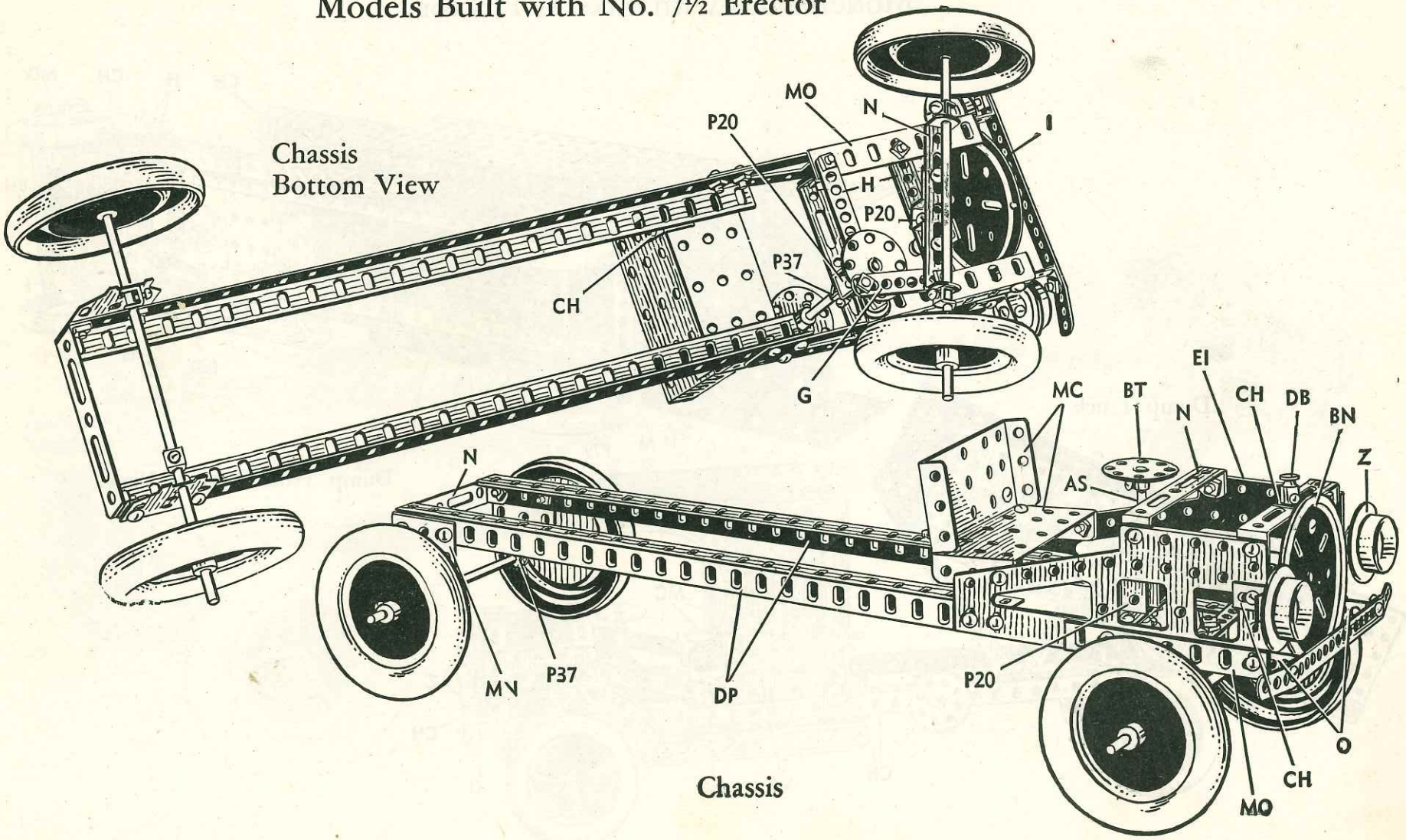


Field Roller



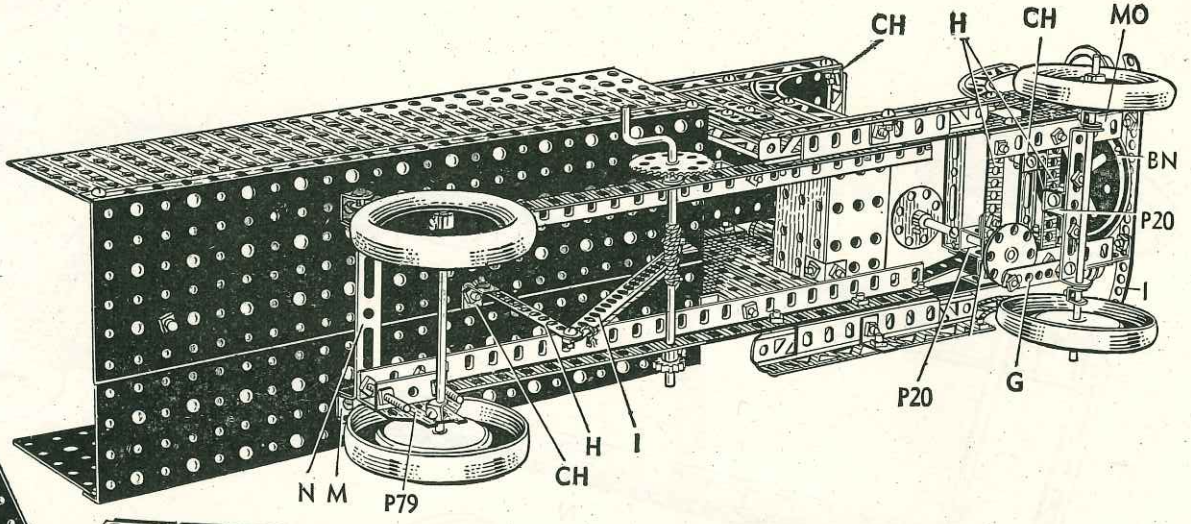
Trolley Repair Truck
For Bottom Detail
see Chassis

Models Built with No. 7½ Erector



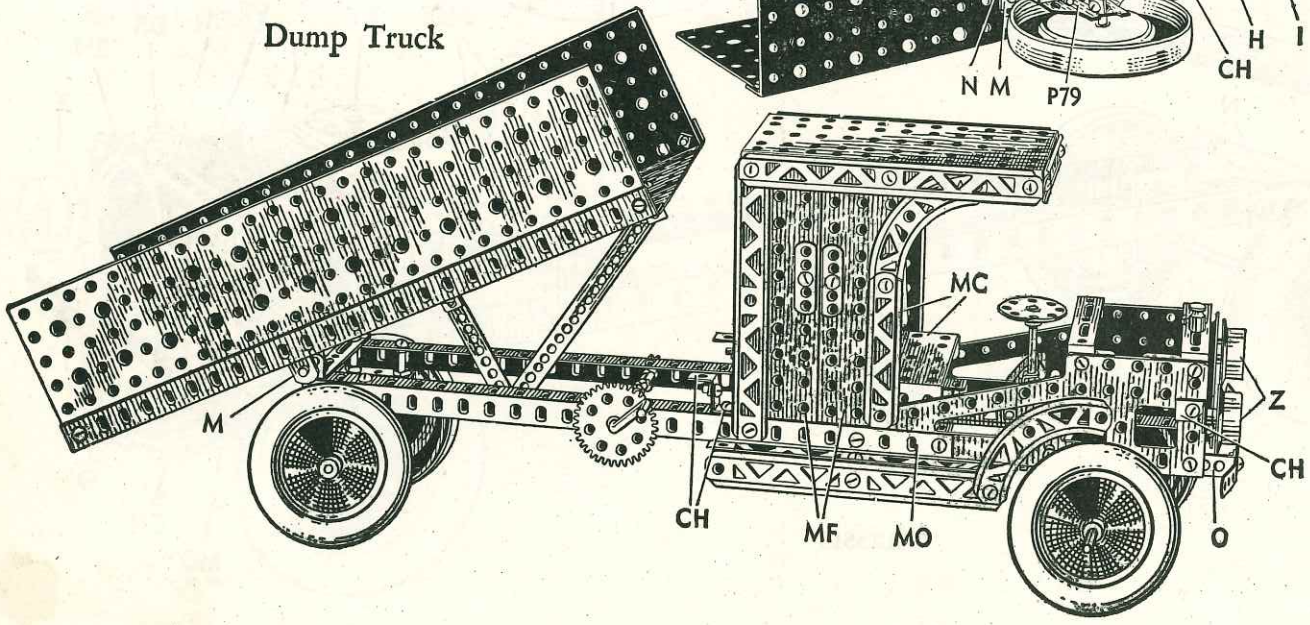
Chassis

Models Built with No. 7½ Erector



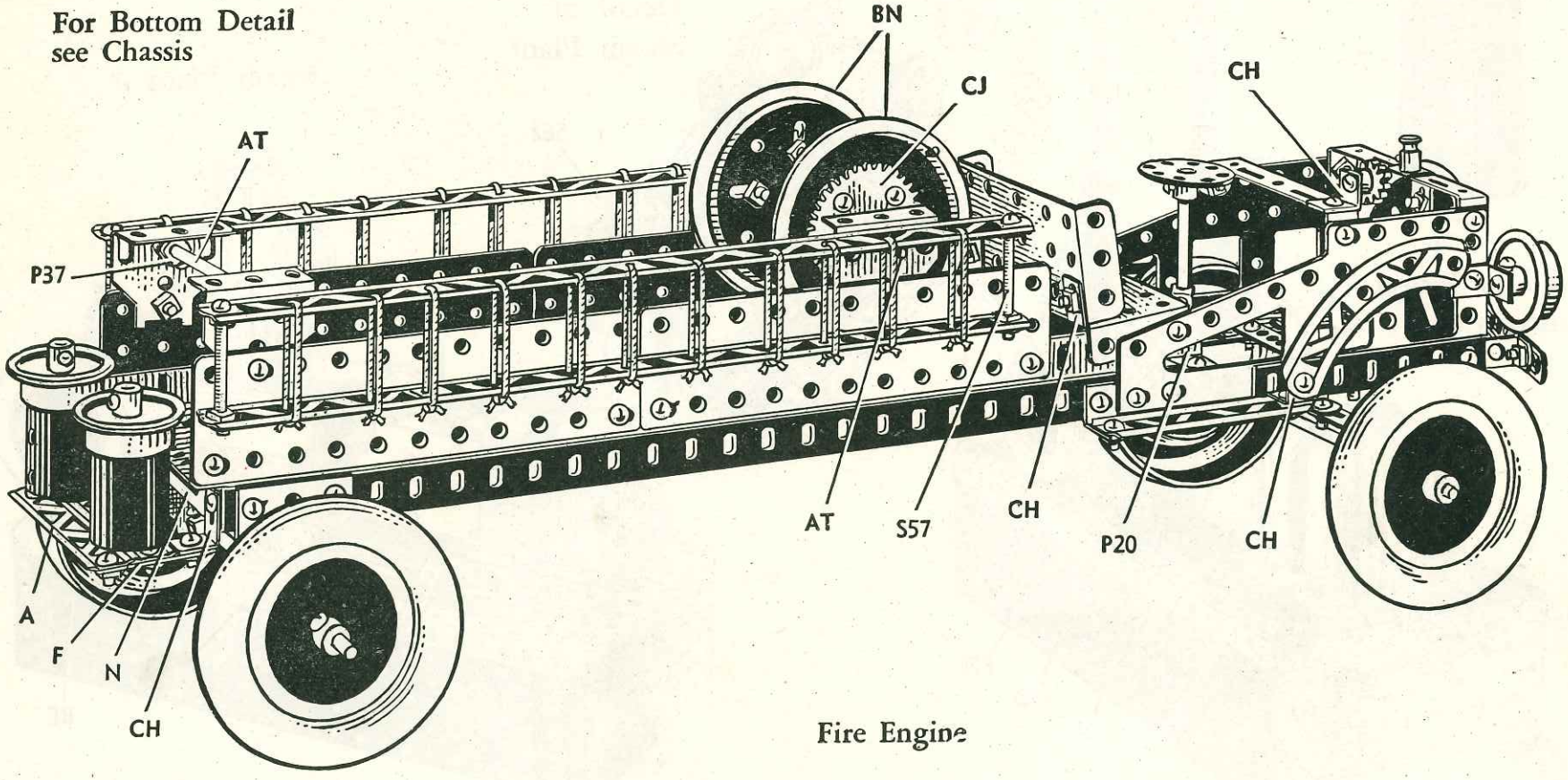
Dump Truck Bottom View

Dump Truck



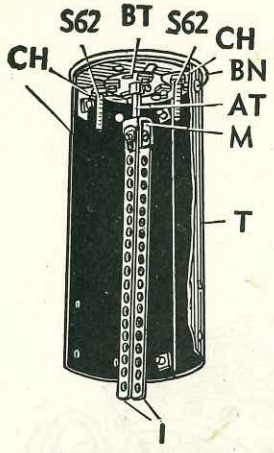
Models Built with No. 7½ Erector

For Bottom Detail
see Chassis



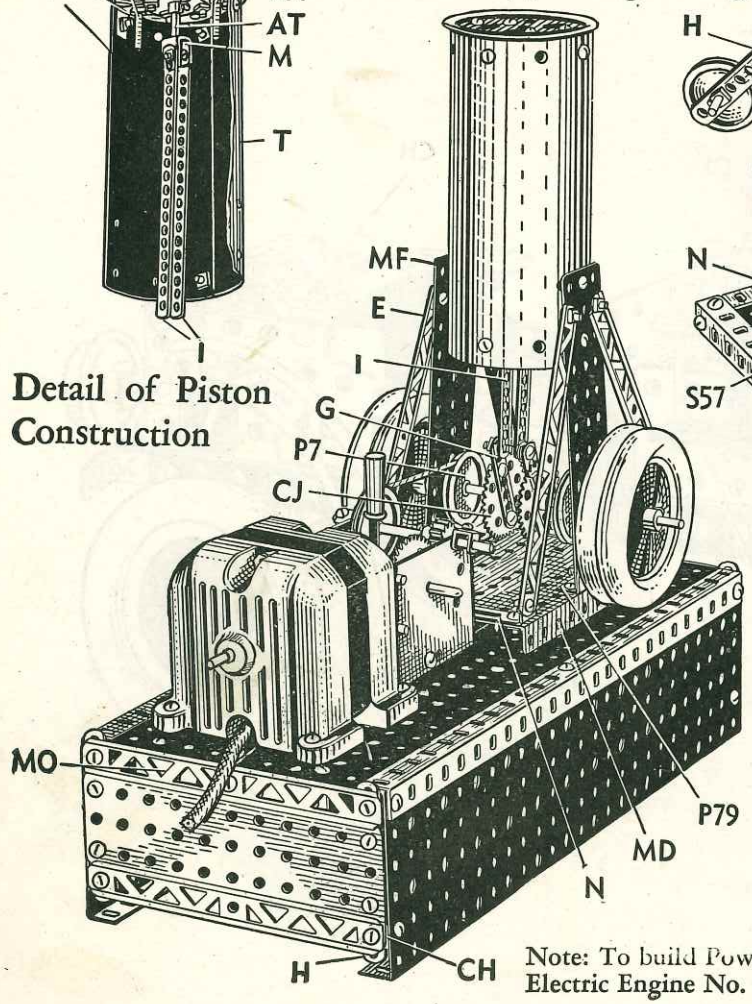
Fire Engine

Models Built with No. 7½ Erector

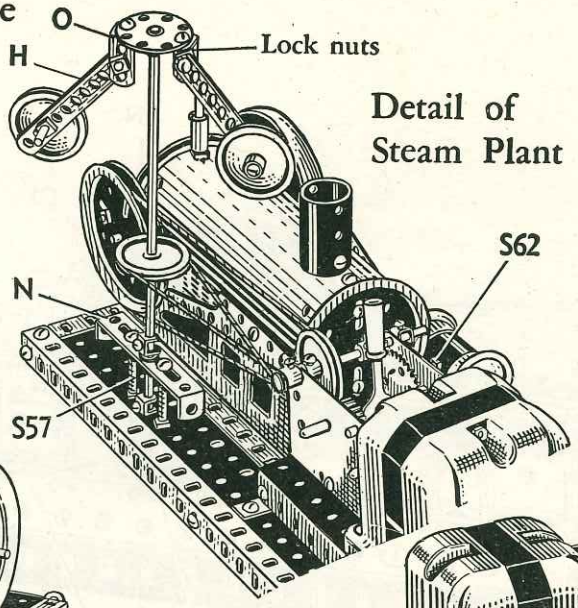


Detail of Piston Construction

Marine Type Engine

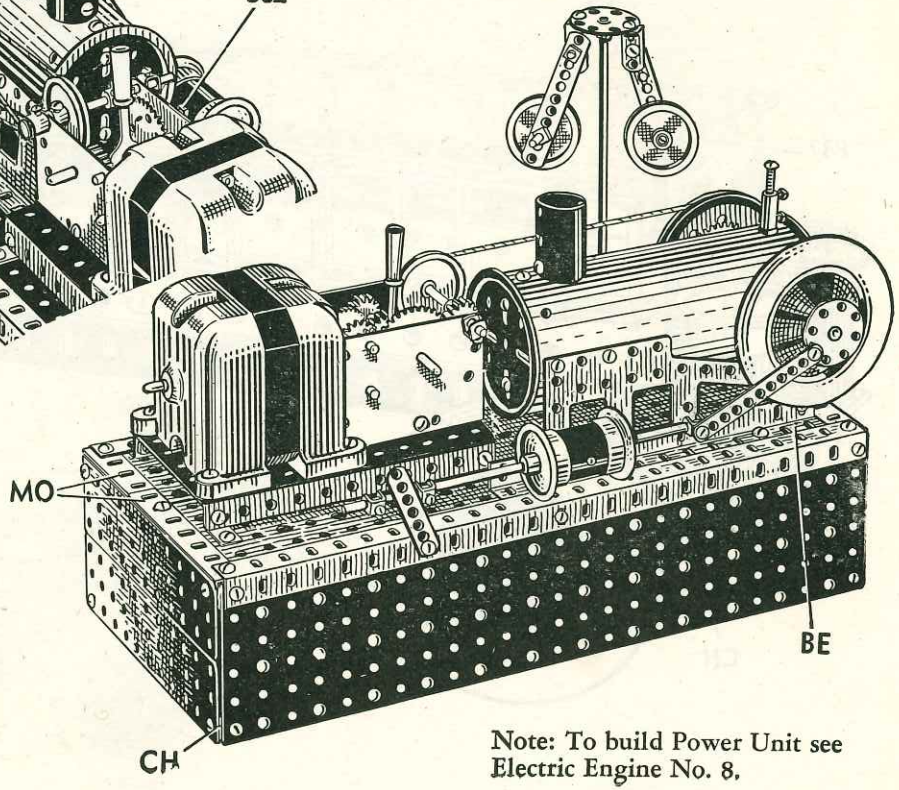


Note: To build Power Unit see Electric Engine No. 8.



Detail of Steam Plant

Steam Plant

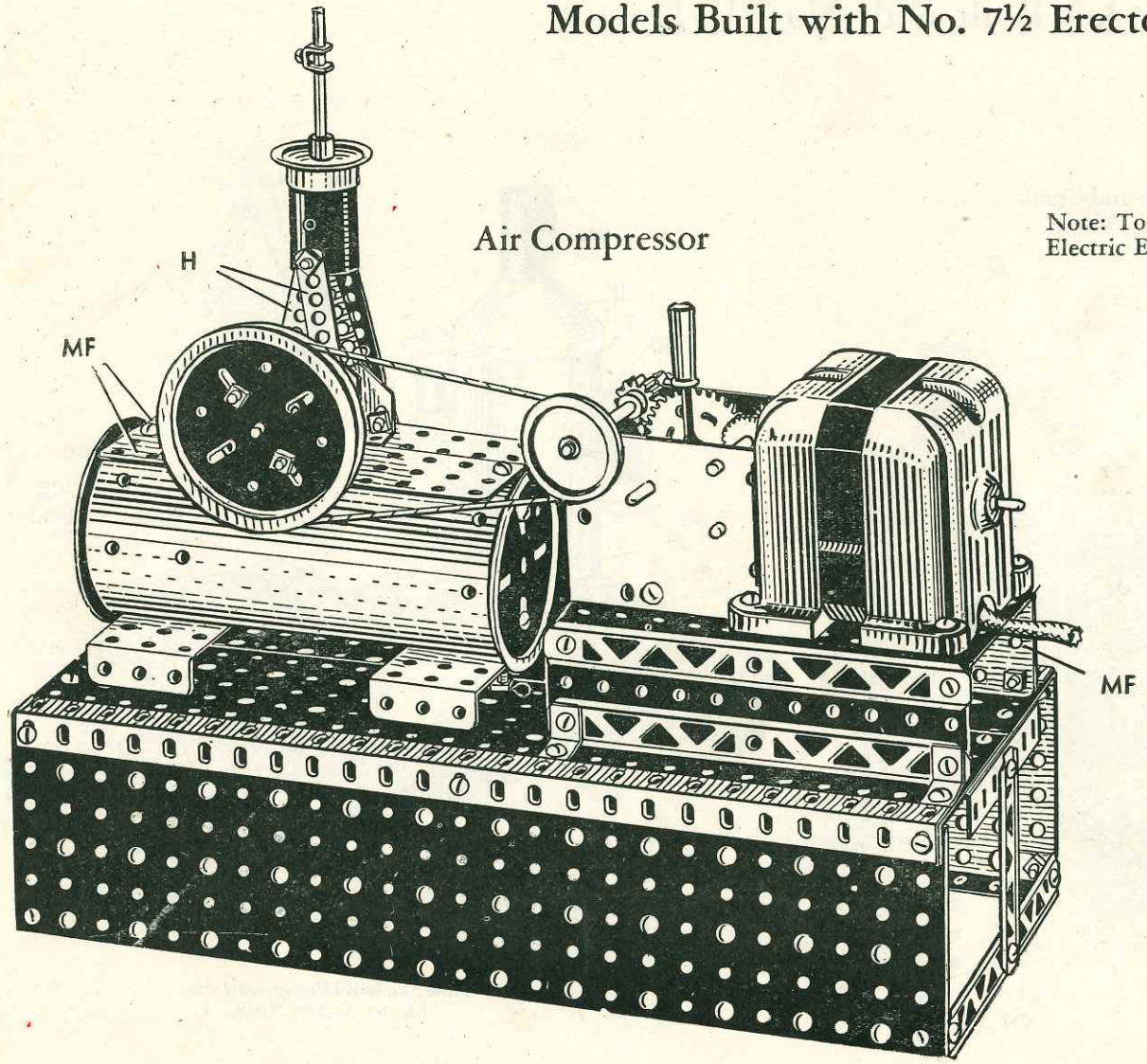


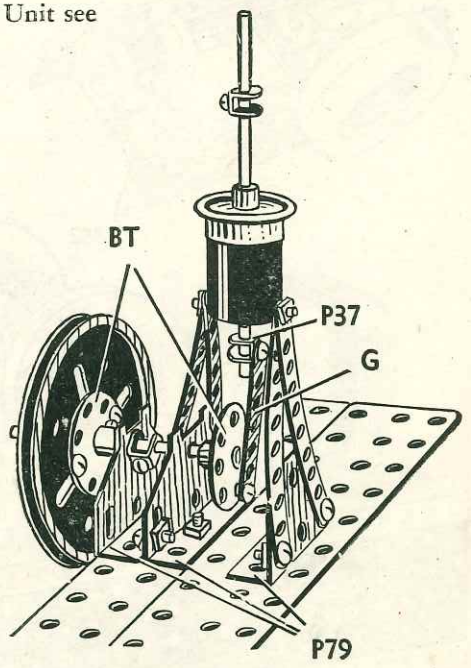
Note: To build Power Unit see Electric Engine No. 8.

Models Built with No. 7½ Erector

Air Compressor

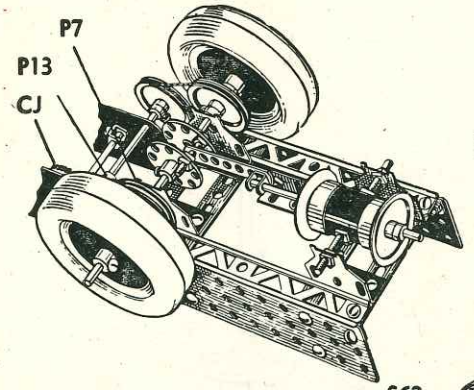
Note: To build Power Unit see Electric Engine No. 8.



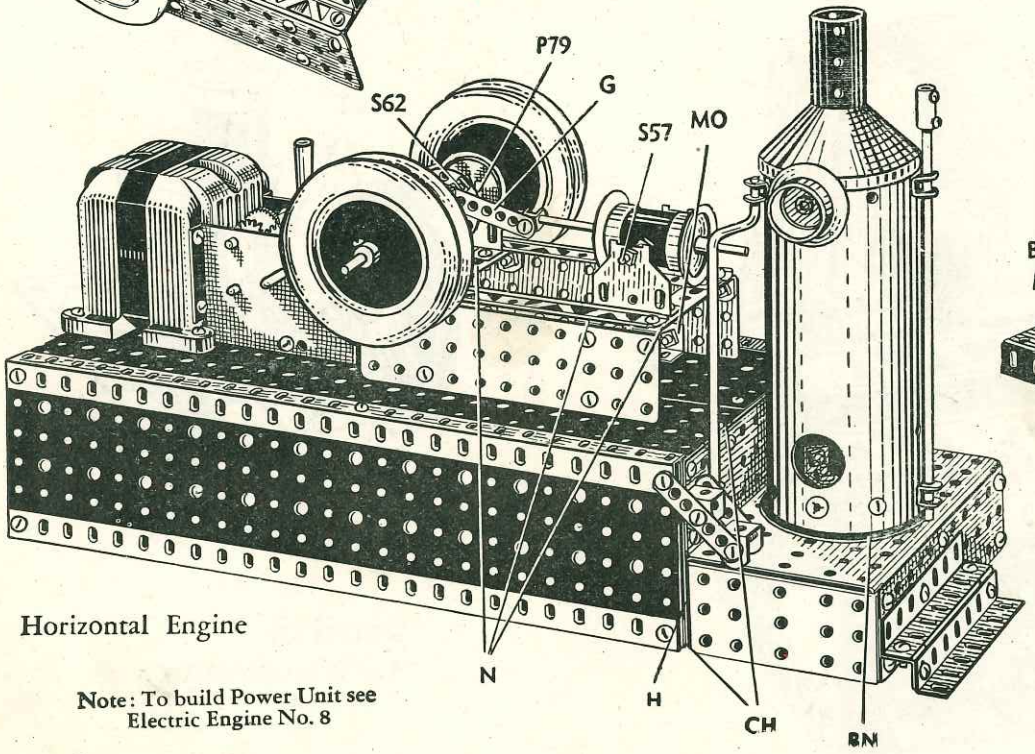


Detail of
Air Compressor

Models Built with No. 7½ Erector

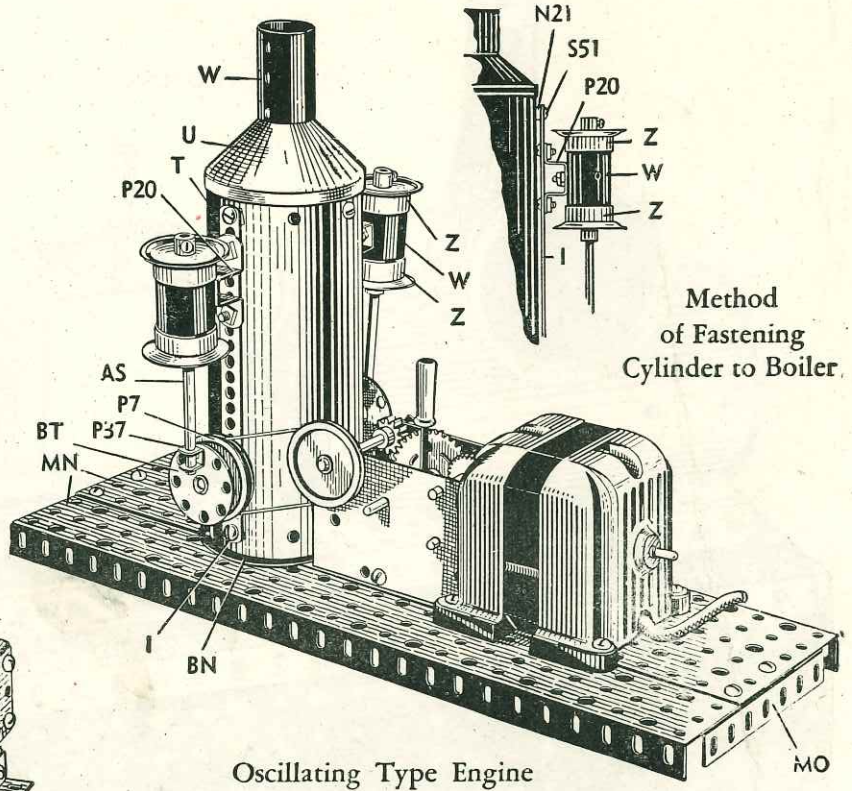


Detail of Drive and Crank for Horizontal Engine



Horizontal Engine

Note: To build Power Unit see Electric Engine No. 8



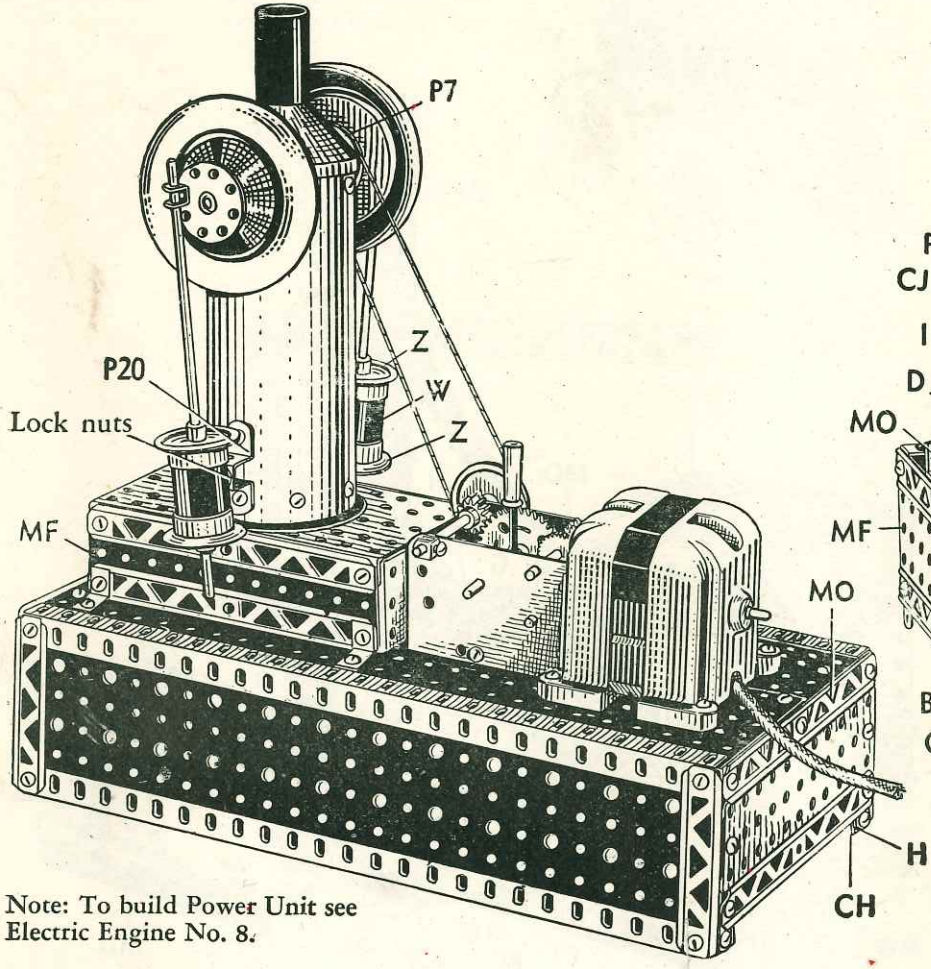
Method of Fastening Cylinder to Boiler

Oscillating Type Engine

Note: To build Power Unit see Electric Engine No. 8

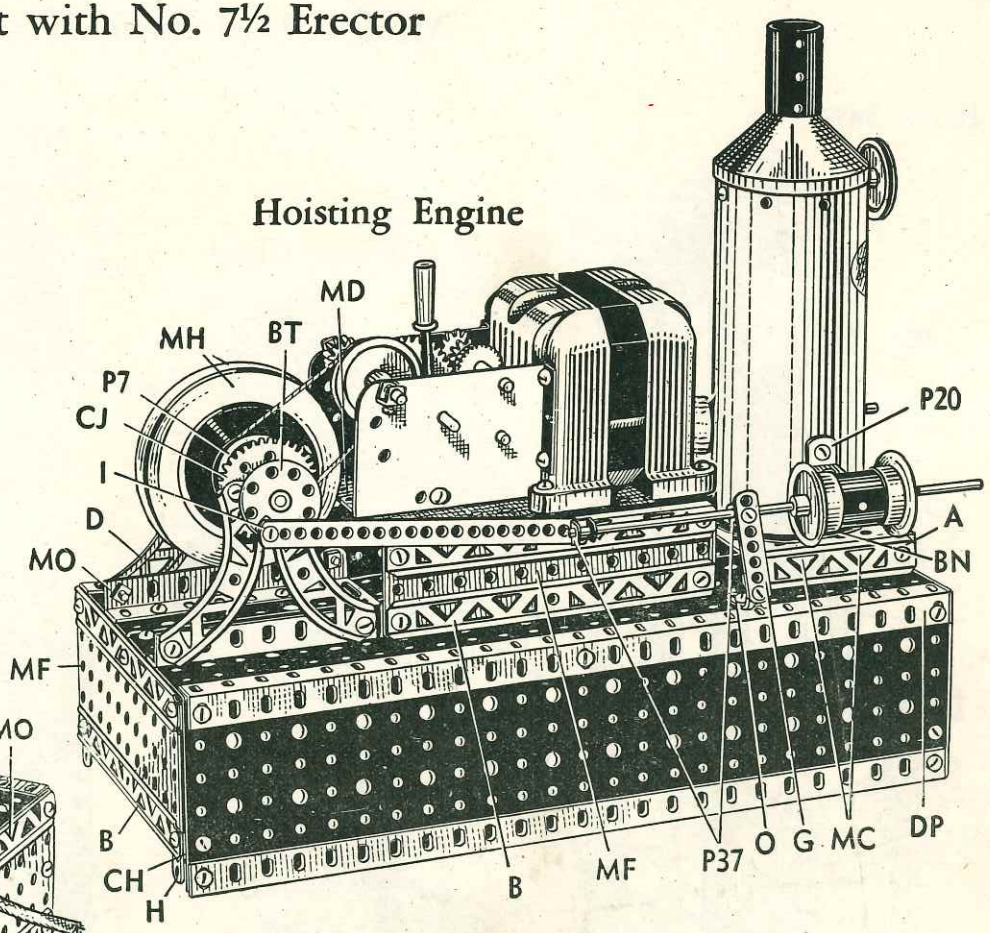
Models Built with No. 7½ Erector

Twin Cylinder Engine



Note: To build Power Unit see Electric Engine No. 8.

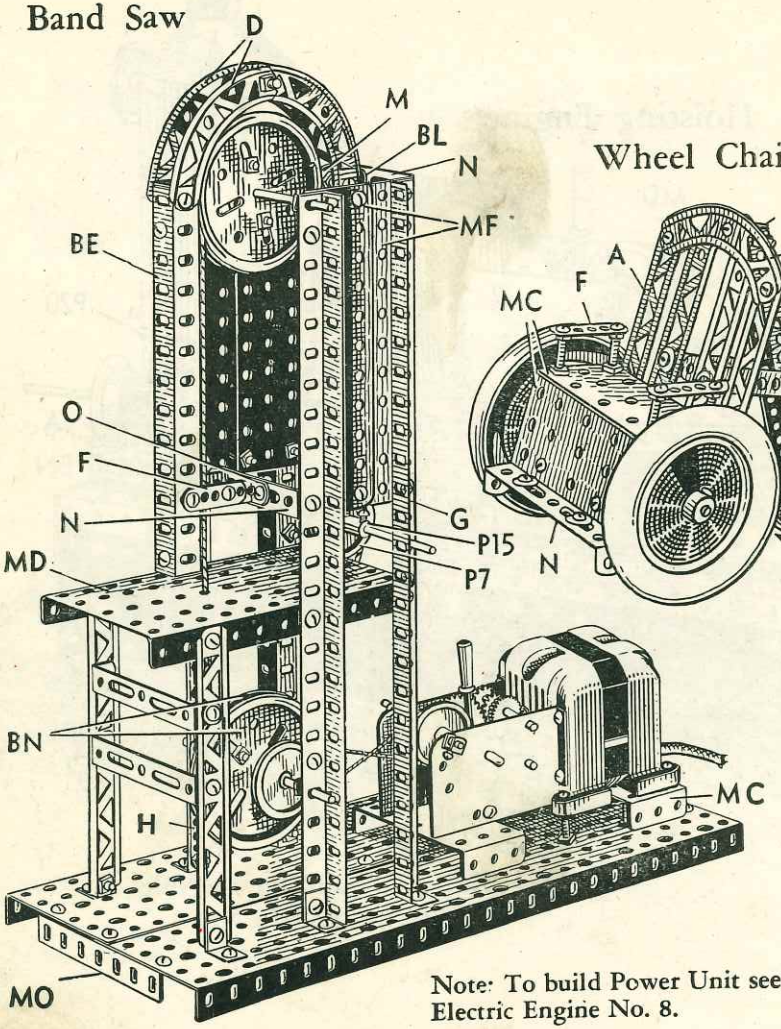
Hoisting Engine



Note: To build Power Unit see Electric Engine No. 8

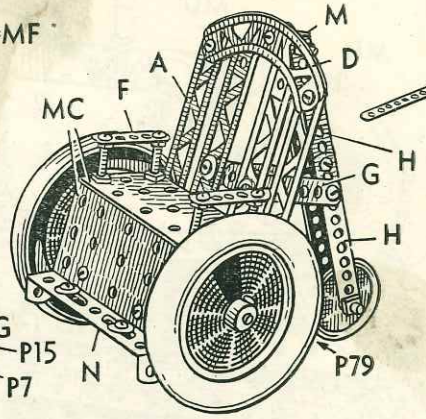
Models Built with No. 7½ Erector

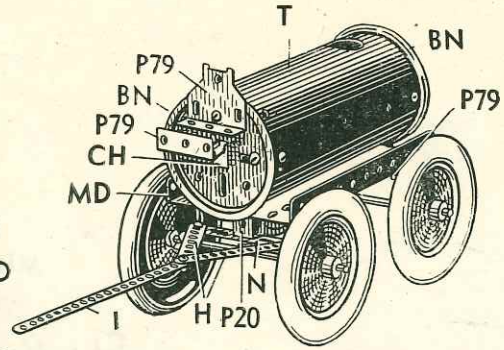
Band Saw



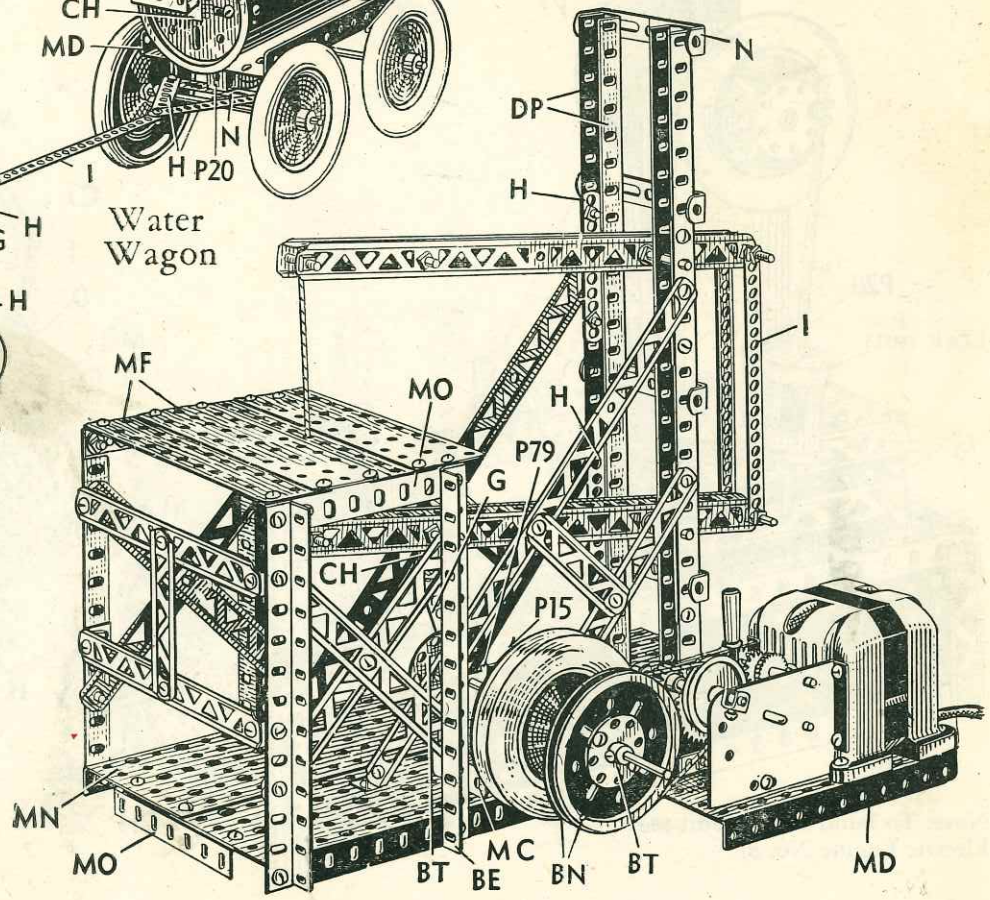
Note: To build Power Unit see Electric Engine No. 8.

Wheel Chair





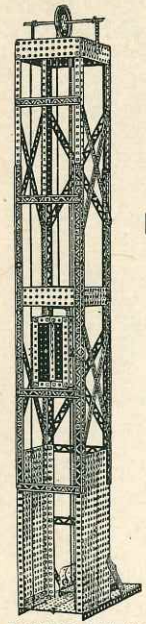
Water Wagon



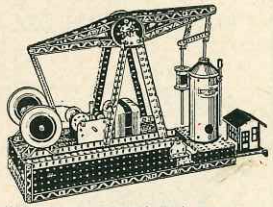
Jig Saw

Note: To build Power Unit see Electric Engine No. 8.

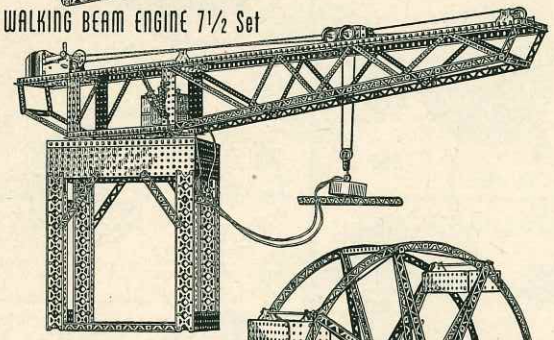
Models Built with Famous ERECTOR Sets



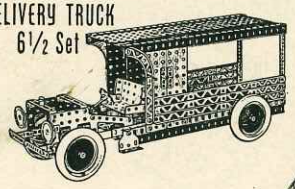
ELEVATOR 8½ Set



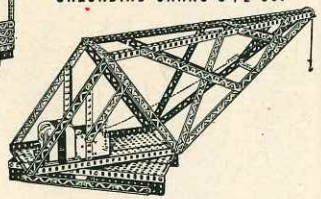
WALKING BEAM ENGINE 7½ Set



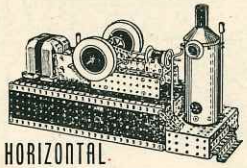
HAMMERHEAD CRANE with LIFTING MAGNET 10½ Set



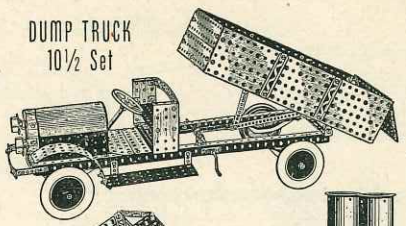
DELIVERY TRUCK 6½ Set



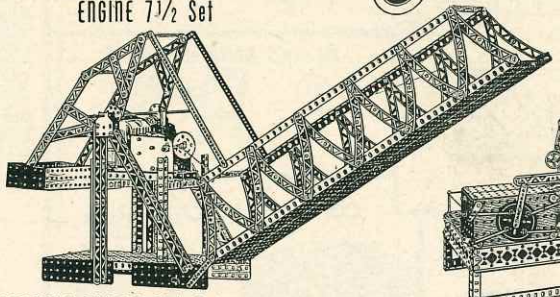
UNLOADING CRANE 6½ Set



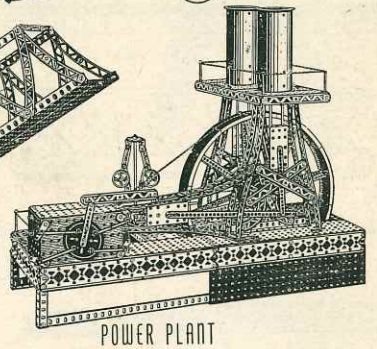
HORIZONTAL ENGINE 7½ Set



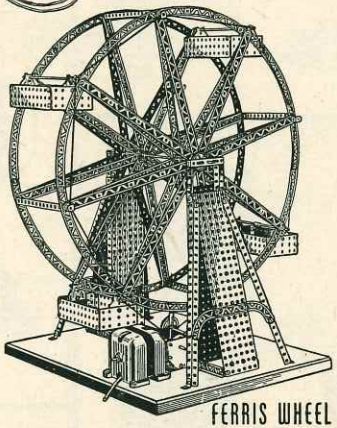
DUMP TRUCK 10½ Set



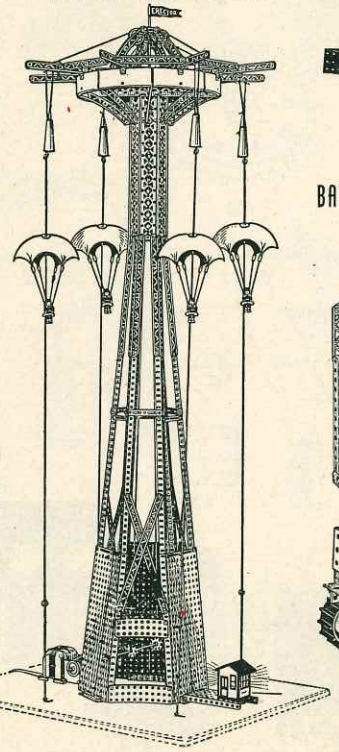
BASCULE BRIDGE 8½ Set



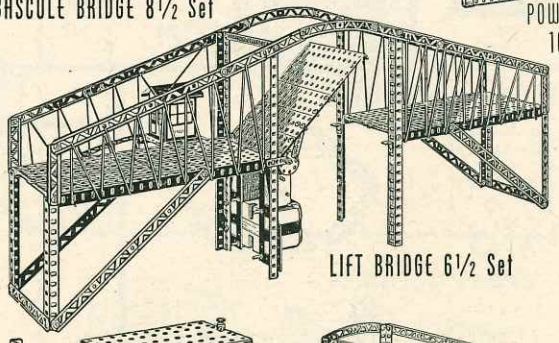
POWER PLANT 10½ Set



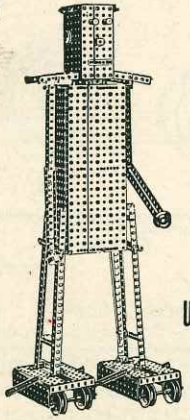
FERRIS WHEEL 8½ Set



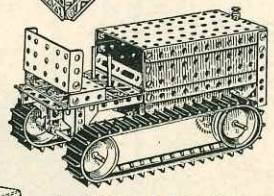
PARACHUTE JUMP 10½ Set



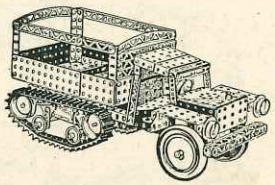
LIFT BRIDGE 6½ Set



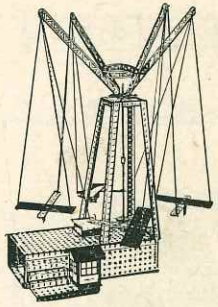
MYSTERIOUS WALKING GIANT 12½ SET



CATERPILLAR TRACTOR 12½ SET



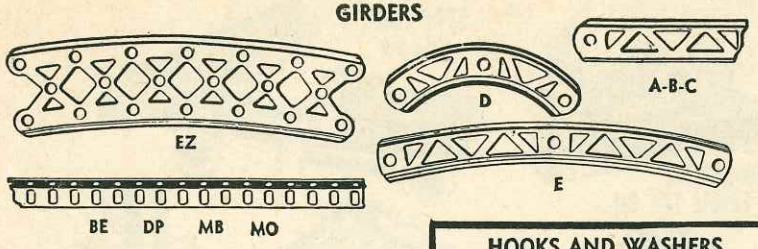
HALF TRACK 12½ SET



AIRPLANE RIDE 4½ Set

ERECTOR SEPARATE PARTS

GIRDERS

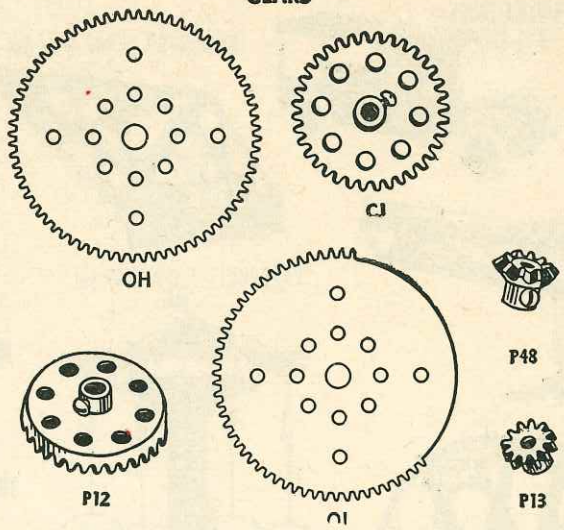


HOOKS AND WASHERS

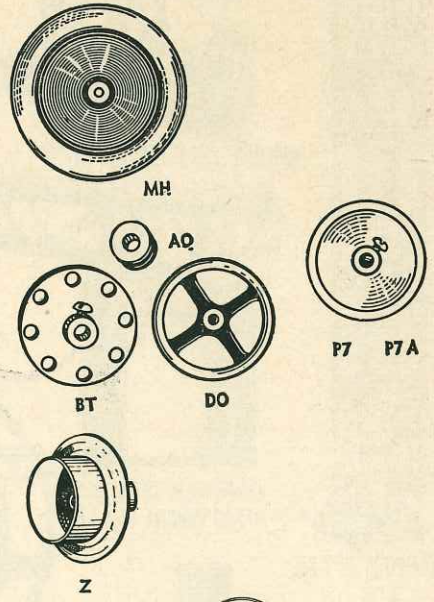
PERFORATED STRIPS

COLLARS AND COUPLINGS

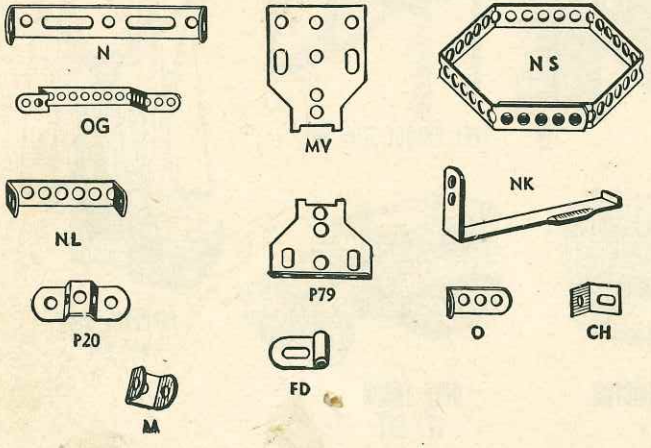
GEARS



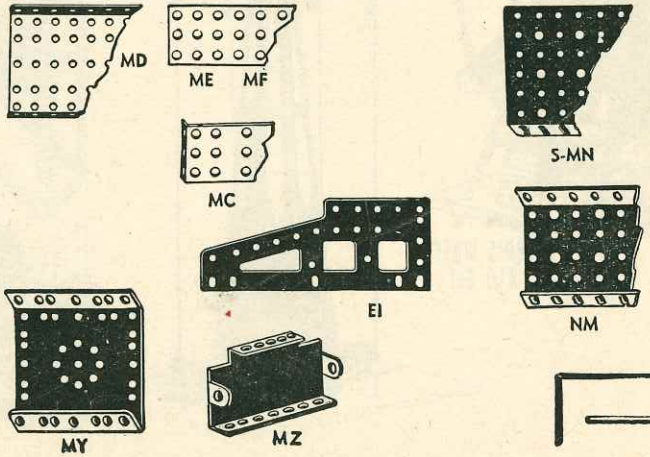
WHEELS, DRUMS, DISCS AND PULLEYS



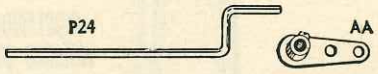
ANGLES AND ANGLE PIECES



BASE PLATES



CRANK

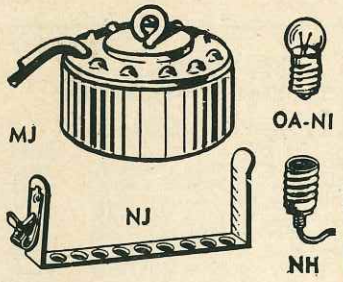


AXLE RODS AND SHAFTING

NY-CX-P57A-AS-AT-CY-P57D-CZ-P57E-DA-P57F-AX

ERECTOR SEPARATE PARTS

ELECTRICAL ACCESSORIES



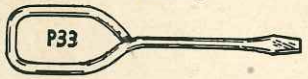
SCREWS AND NUTS

FA-S51-S57-S62-S52

N21

S11

TOOLS



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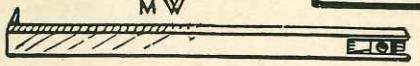
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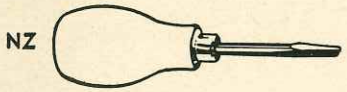
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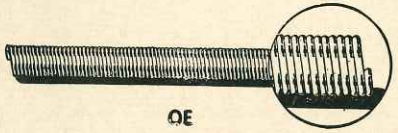
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BOILERS AND ACCESSORIES

CS

CR

BN

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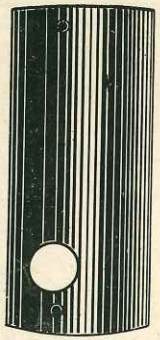
U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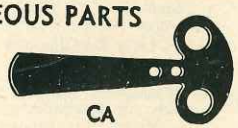
MISCELLANEOUS PARTS

DS

P34

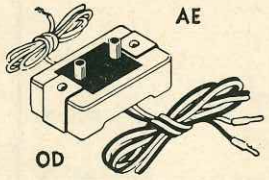

CA

OC

OB

AE

MX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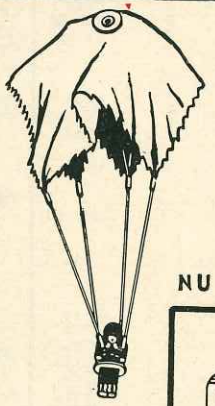
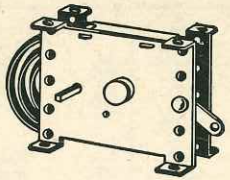

NU

OF

NW

MOTORS AND HOISTING UNITS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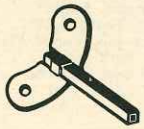
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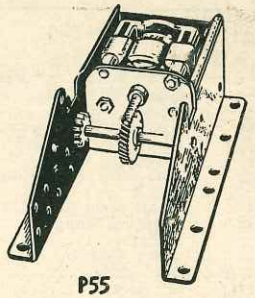
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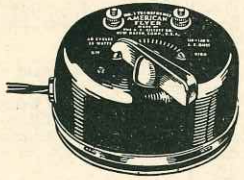

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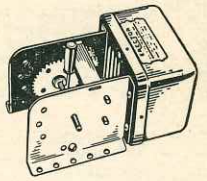
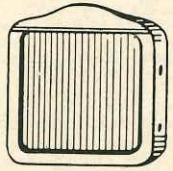

A47

CHASSIS PARTS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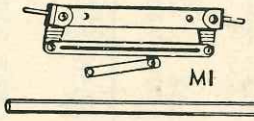
LX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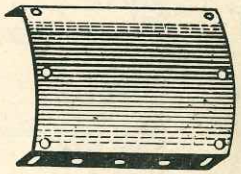

MG

ERECTOR SEPARATE PARTS PRICES

KINDLY ENCLOSE CHECK, MONEY ORDER OR STAMPS WITH YOUR ORDER FOR PARTS

THE A. C. GILBERT CO., NEW HAVEN, CONN., U. S. A.

Trade No.	Name of Part	Page	Price
*N21	8-32 Square Nut	3	.10 doz.
P7	Small Wheel, 7/8" Dia.	2	.10 ea.
P7A	Small Wheel, 1 1/8" Dia.	2	.10 ea.
P12	Crown Gear	2	.15 ea.
P13	12-Tooth Pinion Gear, 1/8"	2	.10 ea.
P13B	12-Tooth Pinion Gear, 7/32"	2	.10 ea.
P15	Coupling	2	.10 ea.
P20	Five Hole Strip—formed	2	.10 ea.
P24	Crank	2	.10 ea.
P33	Small Screw Driver	3	.10 ea.
P34	Hank of String	3	.10 ea.
P37	Collar	2	.25 doz.
P48	Mitre Gear	2	.20 ea.
P57A	2 1/8" Axle	2	.02 ea.
P57D	6" Axle	2	.06 ea.
P57E	8" Axle	2	.08 ea.
P57F	12" Axle	2	.12 ea.
P79	Car Truck	2	.05 ea.
*S11	Set Screw	3	.05 doz.
*S51	1/4" x 8-32 Screw	3	.10 doz.
*S52	1/2" x 8-32 Screw	3	.10 doz.
*S57	3/8" x 8-32 Screw	3	.15 doz.
*S62	7/8" x 8-32 Screw	3	.10 doz.
*FA	1 3/4" x 8-32 Screw	3	.15 doz.
A	2 1/2" Girder	2	.20 doz.
B	5" Girder	2	.35 doz.
C	10" Girder	2	.50 doz.
D	2 1/2" Curved Girder	2	.25 doz.
E	5" Curved Girder	2	.40 doz.
F	5 Hole Strip	2	.10 doz.
G	7 Hole Strip	2	.10 doz.
H	11 Hole Strip	2	.15 doz.
I	21 Hole Strip	2	.20 doz.
J	41 Hole Strip	2	.50 doz.
M	Small Double Angle	2	.25 doz.
N	Long Double Angle	2	.05 ea.
O	Pawl	2	.05 ea.
S	Large Base Plate—21 holes	2	.40 ea.
T	Boiler	3	.30 ea.
U	Boiler Top	3	.20 ea.
W	Stack	3	.05 ea.
Z	Flanged Wheel 1 5/16" Dia.	2	.15 ea.
AA	Eccentric Crank	2	.10 ea.
AE	Spiral Spring	3	.05 ea.
AF	Small Hook	2	.15 doz.
AM	Special Pulley—Metal	2	.05 ea.
AQ	Sheave Pulley	2	.05 ea.
AS	2 7/8" Axle Rod	2	.03 ea.
AT	4" Axle Rod	2	.04 ea.
BE	6" Angle Girder	2	.50 doz.
BH	Solid Collar	2	2 for .10
BL	Small Washer	2	.05 doz.
BN	Regular Turret Plate	3	.15 ea.
BT	Pierced Disc	2	.10 ea.
BY	11-Hole Fibre Strip	2	.05 ea.
CA	Signal Arm	3	.10 ea.
CH	Right Angle	2	.10 doz.
CJ	36-Tooth Gear	2	.20 ea.
CR	Special Turret Plate with hub	3	.20 ea.
CS	Wheel Segment	3	.15 ea.
CZ	7" Axle Rod	2	.07 ea.
DA	10" Axle Rod	2	.10 ea.
DB	Motor Pulley	2	.10 ea.
DE	Steering Column	3	.15 ea.
DK	Flat Spring	3	.10 ea.
DO	Steering Wheel with Hub	2	.15 ea.
DP	12" Angle Girder	2	6 for .50
DS	Cotter Pin	3	.05 doz.
EI	Standard Gear Box Side Plate	2	.15 ea.
EX	Big Channel Girder 12"	2	6 for .50
EY	Big Channel Girder 6"	2	.05 ea.
EZ	Big Channel Curved Girder 6"	2	.10 ea.
FD	Hinged Loop	2	2 for .10
LX	Steering Column Bracket	3	.10 ea.
MA	Radiator	3	.25 ea.
MB	18 1/2" Angle Girder	2	.25 ea.
MC	Base Plate 1" x 2 1/2"	2	.05 ea.
MD	Base Plate 2 1/2" x 5"	2	.10 ea.
ME	Base Plate 1" x 4"	2	.05 ea.
MF	Base Plate 1" x 5"	2	.05 ea.
MG	Radiator Hood	3	.20 ea.
MH	Nickle Rim, 3" Disc Wheel	2	.25 ea.
MI	Front Axle Unit	3	.45 ea.
MJ	Electro Magnet with Cord	3	1.10 ea.
MM	Wrench	3	.05 ea.
MN	12" Base Plate	2	.40 ea.
MO	3" Angle Girder	2	.30 doz.
MV	Flat Car Truck	2	.05 ea.
MW	Nut Holder	3	.10 ea.
MX	House	3	.35 ea.
MY	2 1/2" x 2 1/2" Base Plate	2	.05 ea.
MZ	Bearing Block	2	.10 ea.
NH	Lamp Socket Unit	3	.20 ea.
NI	Bulb—1 1/2 Volt	3	.10 ea.
NJ	Battery Holder	3	.15 ea.
NK	Ratchet	2	.05 ea.
NL	Bolster Bracket	2	2 for .05
NM	10" x 2" Flange Plate	2	.40 ea.
NS	41 Hole strip—formed	2	.10 ea.
NT	Cone	3	.10 ea.
NU	Parachute	3	.35 ea.
NW	Belt and Clip Unit	3	.25 ea.
NX	Tread Pulley	2	.20 ea.
NY	3 1/8" Axle Rod	2	.03 ea.
NZ	Wood Handle Screwdriver	3	.20 ea.
OA	Bulb—18 Volt	3	.30 ea.
OB	Tread Pin	3	.10 ea.
OC	Single Wire and Plug Unit	3	.10 ea.
OD	Control Box with wires	3	1.50 ea.
OE	6" Flexible Coupling	3	.15 ea.
OH	72 Tooth Gear		.18 ea.
OI	Segment of 72 Tooth Gear		.21 ea.
OF	Horse		.23 ea.
OG	21 Hole Strip-Formed		.06 ea.
A48	Mechanical Motor	3	1.75 ea.
K48	Key for Mechancal Motor	3	.20 ea.
A47	Electric Engine, gear shift 110v. A.C. only	3	5.50 ea.
P55	7-15 Volt Erector Motor A.C. or D.C.	3	6.50 ea.
1	Transformer	3	4.95 ea.

NOTE

*N21 Nut used with screws S51, S52, S57, S62, FA
*S11 Set Screw used with pulleys, couplings, etc.

ERECTOR
HOW TO MAKE 'EM BOOKS

Same as copy included in Sets

		Price
No. 2 1/2	Erector How To Make 'Em Book	.25 ea.
No. 4 1/2	Erector How To Make 'Em Book	.25 ea.
No. 6 1/2	Erector How To Make 'Em Book	.35 ea.
No. 7 1/2	Erector How To Make 'Em Book	.35 ea.
No. 8 1/2	Erector How To Make 'Em Book	.40 ea.
No. 10 1/2	Erector How To Make 'Em Book	.60 ea.
No. 12 1/2	Erector How To Make 'Em Book	.75 ea.

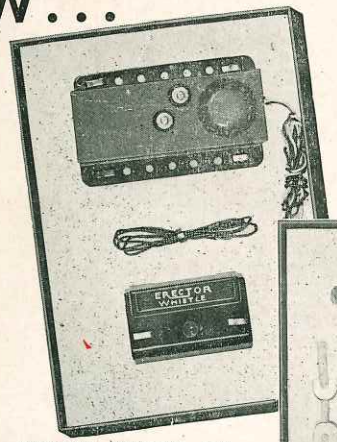
ERECTOR KITS

No. IE	Erector Square Girder Kit	$1.00 ea.
No. 5	Erector Illumination Kit	1.95 ea.

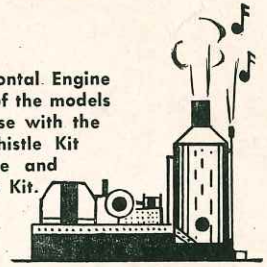
FASCINATING FUN WITH THESE ERECTOR ACCESSORIES!

LIGHT UP MERRY-GO-ROUNDS—BLOW WHISTLE SIGNALS—MAKE YOUR MODELS PUFF SMOKE AND CHOO-CHOO—YOU CAN DO ALL THIS AND MORE WITH THE EXCITING ERECTOR ACCESSORIES SHOWN HERE!

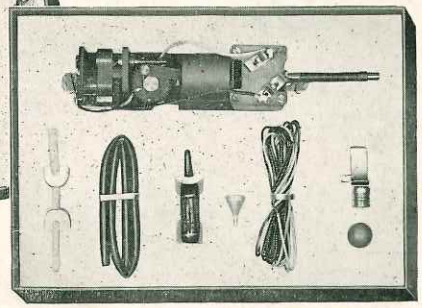
NEW . . .



No. 6 ERECTOR WHISTLE KIT
Sound whistle signals for trains, or communicate by Morse Code with the gang in your neighborhood! Can be used with any Erector Set, but a 7-15 volt Transformer is necessary. Kit includes Whistle unit, control box, power leads and instructions.



This Horizontal Engine is typical of the models you can use with the Erector Whistle Kit and Smoke and Choo-Choo Kit.



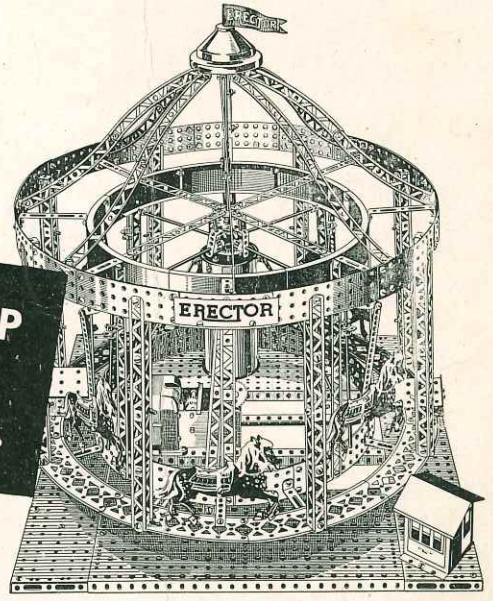
No. 7 ERECTOR SMOKE AND CHOO-CHOO KIT
You can not only have puffing Smoke and realistic Choo-Choo, but actually build a life-like firebox glow right into the boiler of your model! Kit can be used on Erector Set 7½ and up, but 7-15 volt Transformer is necessary to operate Smoke unit.

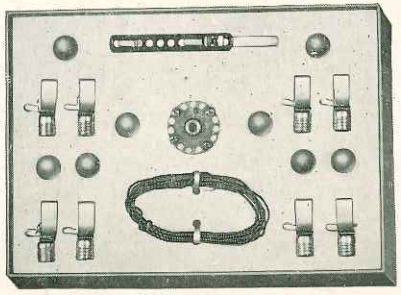
BUILD BIGGER BRIDGES AND TOWERS . . .

No. 1E ERECTOR SQUARE GIRDER KIT
Make your Towers higher, your Bridges and other models larger and more massive with this supply of extra girders. Kit contains twenty 10" girders, eight 5" girders plus ample nuts and bolts.

Your Erector models take on new realism and fun when you connect them with specially-designed Accessories like the four illustrated on this page. With the Illumination Kit you can make many of your models a blaze of light; your Whistle Kit will sound warning blasts on bridges and cranes. The Smoke and Choo-Choo Kit will produce spectacular results that will amaze your friends. And you'll find the Square Girder Kit invaluable in making bigger bridges, higher towers and other models.

LIGHT UP MODELS LIKE THIS . . .





No. 5 ERECTOR ILLUMINATION KIT
A real "must" for any Erector Set! Can be used to light up colored lamps on your Erector models in a variety of spectacular ways. Lights can be stationary, revolving or blinking. Kit contains 4 red and 4 green bulbs, 8 light sockets, 8 feet of plastic-covered wire, commutator and brush unit. 7-15 volt Transformer necessary. For all Erector Sets.

FUN & THRILLS
AMERICAN FLYER®
Developed at the GILBERT HALL OF SCIENCE
ERECTOR®
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ERECTOR